IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

PJM INTERCONNECTION, L.L.C., directly and derivatively on behalf of Power Edge, LLC, Plaintiff, v. MARK GORTON, TOWER RESEARCH CAPITAL LLC, TOWER RESEARCH CAPITAL INVESTMENTS LLC, ACCORD ENERGY LLC, BJ ENERGY LLC, FRANKLIN POWER LLC, GLE TRADING LLC, OCEAN POWER LLC, PILLAR FUND LLC and POWER EDGE LLC, Defendants.	)	C. A. No. 08-216-JJF

DECLARATION OF RICHARD J.L. LOMUSCIO

1. I am associated with the law firm of Sullivan & Cromwell LLP, counsel for defendants Mark Gorton, Tower Research Capital LLC, Tower Research Capital Investments LLC, Accord Energy LLC, BJ Energy LLC, Franklin Power LLC, GLE Trading LLC, Ocean Power LLC, Pillar Fund LLC and Power Edge LLC in this matter.

2. Attached as Exhibit A is a true and correct copy of excerpted portions of the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. ("PJM Operating Agreement"). A complete copy of the PJM Operating Agreement is available at http://www.pjm.com/documents/downloads/agreements/oa.pdf.

3. Attached as Exhibit B is a true and correct copy of excerpted portions of the PJM Open Access Transmission Tariff ("PJM Tariff"). A complete copy of the PJM

Tariff is available at http://www.pjm.com/documents/downloads/agreements/20080424-pjm-tariff.pdf.

4. Attached as Exhibit C is a letter dated January 18, 2008 from PJM Interconnection, L.L.C. ("PJM") to the Federal Energy Regulatory Commission ("FERC"), proposing a change in the default allocation provisions of the PJM Operating Agreement, filed with FERC on January 18, 2008, Docket No. ER08-455-000.

5. Attached as Exhibit D is the Order on Tariff Revisions, 122 FERC ¶ 61,279, Docket No. ER08-455-000, issued by FERC on March 25, 2008.

6. Attached as Exhibit E is the Complaint of PJM against Accord Energy LLC, BJ Energy LLC, Franklin Power LLC, GLE Trading LLC, Ocean Power LLC, Pillar Fund LLC, Power Edge LLC, Tower Research Capital LLC, and Tower Research Capital Investments LLC, filed with FERC on March 7, 2008, Docket No. EL08-44-000.

7. Attached as Exhibit F is a true and correct copy of the purported Proof of Service on Tower Research Capital LLC, filed in this matter on April 17, 2008.

8. Attached as Exhibit G is a true and correct copy of the purported Proof of Service on Mark Gorton, filed in this matter on April 17, 2008.

9. Attached as Exhibit H is a true and correct copy of the March 17, 2008 memorandum from Wachtell, Lipton, Rosen & Katz to Vincent P. Duane, PJM's General Counsel. A complete copy of this memorandum is available at http://www.pjm.com/committees/crmsc/downloads/20080403-wachtell-netting-memo.pdf.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct.

Dated: May 7, 2008

Richard J.L. Lomuscio

IN THE UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE

CERTIFICATE OF SERVICE

I hereby certify that on May 7, 2008, I electronically filed the foregoing document with the Clerk of Court using CM/ECF which will send notification of such filing(s) and Hand Delivered to the following:

BY HAND DELIVERY
Collins J. Seitz, Jr., Esquire
Max B. Walton, Esquire
Connolly Bove Lodge & Hutz LLP
The Nemours Building
1007 North Orange Street
8th Floor
P.O. Box 2207
Wilmington, DE 19899

I hereby certify that on May 7, 2008, I have sent by Federal Express, the foregoing document to the following non-registered participant:

BY FEDERAL EXPRESS
Eric N. Macey, Esquire
Novack & Macey LLP
100 North Riverside Plaza
Chicago, IL 60606-1501

Steven J. Fineman (#4025)
Richards, Layton & Finger, P.A.
One Rodney Square
P.O. Box 551
Wilmington, Delaware 19899
(302) 651-7700
fineman@rlf.com

EXHIBIT A

AMENDED AND RESTATED

OPERATING AGREEMENT

OF

PJM INTERCONNECTION, L.L.C.

The following sheets reflect all revisions approved by FERC in orders issued through April 18, 2008, and all revisions from compliance filings submitted through April 18, 2008, as well as clean up revisions to: (1) incorporate language accepted by FERC in prior versions of the Operating Agreement, but not previously integrated into the current effective pages; and (2) correct minor typographical and formatting errors.

The language reflected in *italics* is accepted by the Commission, however, because of when it was filed, accepted by the Commission, and/or effective it is subject to a clean-up filing in accordance with Order No. 614.

K:\pjm\Current Effective Agreements\Stripped Current Effectives\PJM Operating Agreement 4-18-08.doc

1. DEFINITIONS

Unless the context otherwise specifies or requires, capitalized terms used in this Agreement shall have the respective meanings assigned herein or in the Schedules hereto for all purposes of this Agreement (such definitions to be equally applicable to both the singular and the plural forms of the terms defined). Unless otherwise specified, all references herein to Sections, Schedules, Exhibits or Appendices are to Sections, Schedules, Exhibits or Appendices of this Agreement. As used in this Agreement:

1.1 Act.

"Act" shall mean the Delaware Limited Liability Company Act, Title 6, §§ 18-101 to 18-1109 of the Delaware Code.

1.1A Active and Significant Business Interest.

"Active and Significant Business Interest" is a term that shall be used to assess the scope of a Member's PJM membership and shall be based on a Member's activity in the PJM RTO and/or Interchange Energy Markets. A Member's Active and Significant Business Interest shall: 1) be determined relative to the scope of the Member's PJM membership and activity in the PJM RTO and/or Interchange Energy Markets considering, among other things, the Member's public statements and/or regulatory filings regarding its PJM activities; and 2) reflect a substantial contributor to the Member's recent market activity, revenues, costs, investment, and/or earnings when considering the Member and its corporate affiliates' interests within the PJM footprint.

1.2 Affiliate.

"Affiliate" shall mean any two or more entities, one of which controls the other or that are under common control. "Control" shall mean the possession, directly or indirectly, of the power to direct the management or policies of an entity. Ownership of publicly-traded equity securities of another entity shall not result in control or affiliation for purposes of this Agreement if the securities are held as an investment, the holder owns (in its name or via intermediaries) less than 10 percent of the outstanding securities of the entity, the holder does not have representation on the entity's board of directors (or equivalent managing entity) or vice versa, and the holder does not in fact exercise influence over day-to-day management decisions. Unless the contrary is demonstrated to the satisfaction of the Members Committee, control shall be presumed to arise from the ownership of or the power to vote, directly or indirectly, ten percent or more of the voting securities of such entity.

1.2A Affected Member.

"Affected Member" shall mean a Member which as a result of its participation in PJM's markets or its membership in the LLC PJM provided confidential information to the Office of the Interconnection, which confidential information is requested by, or is disclosed to an Authorized Person under a Non-Disclosure Agreement.

1.3 Agreement or Operating Agreement.

"Agreement" or "Operating Agreement" shall mean this Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., including all Schedules, Exhibits, Appendices, addenda or supplements hereto, as amended from time to time.

1.4 Annual Meeting of the Members.

"Annual Meeting of the Members" shall mean the meeting specified in Section 8.3.1 of this Agreement.

1.9 Effective Date.

"Effective Date" shall mean August 1, 1997, or such later date that FERC permits this Agreement to go into effect.

1.10 Emergency.

"Emergency" shall mean: (i) an abnormal system condition requiring manual or automatic action to maintain system frequency, or to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property; or (ii) a fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel; or (iii) a condition that requires implementation of emergency procedures as defined in the PJM Manuals.

1.11 End-Use Customer.

"End-Use Customer" shall mean a Member that is a retail end-user of electricity within the PJM Region. A Member that is a retail end-user that owns generation may qualify as an End-Use customer if: (1) the average physical unforced capacity owned by the Member and its affiliates in the PJM region over the five Planning Periods immediately preceding the relevant Planning Period does not exceed the average PJM capacity obligation for the Member and its affiliates over the same time period; or (2) the average energy produced by the Member and its affiliates within the PJM region over the five Planning Periods immediately preceding the relevant Planning Period does not exceed the average energy consumed by that Member and its affiliates within the PJM region over the same time period. The foregoing notwithstanding, taking retail service may not be sufficient to qualify a Member as an End-Use Customer.

1.12 FERC.

"FERC" shall mean the Federal Energy Regulatory Commission or any successor federal agency, commission or department exercising jurisdiction over this Agreement.

1.13 Finance Committee.

"Finance Committee" shall mean the body formed pursuant to Section 7.5.1 of this Agreement.

1.14 Generation Owner.

"Generation Owner" shall mean a Member that owns or leases, with right equivalent to ownership, a Capacity Resource or an Energy Resource within the PJM footprint. The foregoing notwithstanding, for a planned generation resource to qualify a Member as a Generation Owner, such resource shall have cleared an RPM auction, and for Energy Resources, the resource shall have a FERC-jurisdictional interconnection agreement or wholesale market participation agreement within PJM.

A Member that is primarily a retail end-user of electricity that owns generation may quailify as a Generation Owner if: (1) the generation resource is the subject of a FERC-jurisdictional interconnection agreement or wholesale market participation agreement within PJM; (2) the average physical unforced capacity owned by the Member and its affiliates over the five Planning Periods immediately preceding the relevant Planning Period exceeds the average PJM capacity obligation of the Member and its affiliates over the same time period; and (3) the average energy produced by the Member and its affiliates within PJM over the five Planning Periods immediately preceding the relevant Planning Period

1.18 Load Serving Entity.

"Load Serving Entity" shall mean an entity, including a load aggregator or power marketer, (1) serving end-users within the PJM Region, and (2) that has been granted the authority or has an obligation pursuant to state or local law, regulation or franchise to sell electric energy to end-users located within the PJM Region, or the duly designated agent of such an entity.

1.19 Locational Marginal Price.

"Locational Marginal Price" shall mean the hourly integrated market clearing marginal price for energy at the location the energy is delivered or received, calculated as specified in Section 2 of Schedule 1 of this Agreement.

1.20 MAAC.

"MAAC" shall mean the Mid-Atlantic Area Council, a reliability council under § 202 of the Federal Power Act established pursuant to the MAAC Agreement dated August 1, 1994 or any successor thereto.

1.20A MAAC Control Zone.

"MAAC Control Zone" shall mean the aggregate of the Transmission Facilities of Atlantic City Electric Company, Baltimore Gas and Electric Company, Delmarva Power and Light Company, Jersey Central Power and Light Company, Metropolitan Edison Company, PECO Energy Company, Pennsylvania Electric Company, PPL Electric Utilities Corporation, Potomac Electric Power Company, Public Service Electric and Gas Company, and Rockland Electric Company.

1.20B MAIN.

"MAIN" shall mean the Mid-America Interconnected Network, a reliability council under § 202 of the Federal Power Act established pursuant to the Amended and Restated Bylaws of MAIN, dated January 8, 1998, or any successor thereof.

1.20C MAIN Control Zone.

"MAIN Control Zone" shall mean any one of the one or more Control Zones comprised of the Transmission Facilities of one or more of the Transmission Owners for which MAIN is the Applicable Regional Reliability Council, as designated in the PJM Manuals.

1.21 Market Buyer.

"Market Buyer" shall mean a Member that has met reasonable creditworthiness standards established by the Office of the Interconnection and that is otherwise able to make purchases in the PJM Interchange Energy Market.

1.22 Market Participant.

"Market Participant" shall mean a Market Buyer, a Market Seller, an Economic Load Response Participant, or all three.

1.23 Market Seller.

"Market Seller" shall mean a Member that has met reasonable creditworthiness standards established by the Office of the Interconnection and that is otherwise able to make sales in the PJM Interchange Energy Market.

1.24 Member.

"Member" shall mean an entity that satisfies the requirements of Section 11.6 of this Agreement and that (i) is a member of the LLC immediately prior to the Effective Date, or (ii) has executed an Additional Member Agreement in the form set forth in Schedule 4 hereof.

1.25 Members Committee.

"Members Committee" shall mean the committee specified in Section 8 of this Agreement composed of representatives of all the Members.

1.26 NERC.

"NERC" shall mean the North American Electric Reliability Council, or any successor thereto.

3. PURPOSES AND POWERS OF LLC

3.1 Purposes.

The purposes of the LLC shall be:

(a) to operate in accordance with FERC requirements as an Independent System Operator, comprised of the PJM Board, the Office of the Interconnection, and the Members Committee, with the authorities and responsibilities set forth in this Agreement;

(b) as necessary for the operation of the PJM Region as specified above: (i) to acquire and obtain licenses, permits and approvals, (ii) to own or lease property, equipment and facilities, and (iii) to contract with third parties to obtain goods and services, provided that, the LLC may procure goods and services from a Member only after open and competitive bidding; and

(c) to engage in any lawful business permitted by the Act or the laws of any jurisdiction in which the LLC may do business and to enter into any lawful transaction and engage in any lawful activities in furtherance of the foregoing purposes and as may be necessary, incidental or convenient to carry out the business of the LLC as contemplated by this Agreement.

3.2 Powers.

The LLC shall have the power to do any and all acts and things necessary, appropriate, advisable, or convenient for the furtherance and accomplishment of the purposes of the LLC, including, without limitation, to engage in any kind of activity and to enter into and perform obligations of any kind necessary to or in connection with, or incidental to, the accomplishment of the purposes of the LLC, so long as said activities and obligations may be lawfully engaged in or performed by a limited liability company under the Act.

4. EFFECTIVE DATE AND TERMINATION

4.1 Effective Date and Termination.

(a) The existence of the LLC commenced on March 31, 1997, as provided in the Certificate of Formation and Certificate of Conversion which were filed with the Recording Office on March 31, 1997. This Agreement shall amend and restate the Operating Agreement of PJM Interconnection, LLC as of the Effective Date.

(b) The LLC shall continue in existence until terminated in accordance with the terms of this Agreement. The withdrawal or termination of any Member is subject to the provisions of Section 18.18 of this Agreement.

(c) Any termination of this Agreement or withdrawal of any Member from the Agreement shall be filed with the FERC pursuant to Section 205 of the Federal Power Act and shall become effective only upon the FERC's approval, acceptance without suspension, or, if suspended, the expiration of the suspension period before the FERC has issued an order on the merits of the filing.

4.2 Governing Law.

This Agreement and all questions with respect to the rights and obligations of the Members, the construction, enforcement and interpretation hereof, and the formation, administration and

11.3.4 Reports to the Office of the Interconnection.

Each Member shall report as promptly as possible to the Office of the Interconnection any changes in its operating practices and procedures relating to the reliability of the bulk power supply facilities of the PJM Region. The Office of the Interconnection shall review such reports, and if any change in an operating practice or procedure of the Member is not in accord with the established operating principles, practices and procedures for the PJM Region and such change adversely affects such region and regional reliability, it shall so inform such Member, and the other Members through their representative on the Operating Committee, and shall direct that such change be modified to conform to the established operating principles, practices and procedures.

11.4 Regional Transmission Expansion Planning Protocol.

The Members shall participate in regional transmission expansion planning in accordance with the Regional Transmission Expansion Planning Protocol set forth in Schedule 6 to this Agreement.

11.5 Member Right to Petition.

(a) Nothing herein shall deprive any Member of the right to petition FERC to modify any provision of this Agreement or any Schedule or practice hereunder that the petitioning Member believes to be unjust, unreasonable, or unduly discriminatory under section 206 of the Federal Power Act, subject to the right of any other Member (a) to oppose said proposal, or (b) to withdraw from the LLC pursuant to Section 4.1.

(b) Nothing herein shall be construed as affecting in any way the right of the Members, acting pursuant to a vote of the Members Committee as specified in Section 8.4, unilaterally to make an application to FERC for a change in any rate, charge, classification, tariff or service, or any rule or regulation related thereto, under section 205 of the Federal Power Act and pursuant to the rules and regulations promulgated by FERC thereunder, subject to the right of any Member that voted against such change in any rate, charge, classification, tariff or service, or any rule or regulation related thereto, in intervene in opposition to any such application.

11.6 Membership Requirements.

(a) To qualify as a Member, an entity shall:

i) Be a Transmission Owner a Generation Owner, an Other Supplier, an Electric Distributor, or an End-Use Customer; and

ii) Accept the obligations set forth in this Agreement.

(b) Certain Members that are Load Serving Entities are parties to the Reliability Assurance Agreement. Upon becoming a Member, any entity that is a Load Serving Entity in the PJM Region and that wishes to become a Market Buyer shall also simultaneously execute the Reliability Assurance Agreement

(c) An entity that wishes to become a party to this Agreement shall apply, in writing, to the President setting forth its request, its qualifications for membership, its agreement to supply data as specified in this Agreement, its agreement to pay all costs and expenses in accordance with Schedule 3, and providing all information specified pursuant to the Schedules to this Agreement for entities that wish to become Market Participants. Any such application that meets all applicable requirements shall be approved by the President within sixty (60) days.

(d) Nothing in this Section 11 is intended to remove, in any respect, the choice of participation by other utility companies or organizations in the operation of the PJM Region through inclusion in the System of a Member.

(e) An entity whose application is accepted by the President pursuant to Section 11.6(c) shall execute a supplement to this Agreement in substantially the form prescribed in Schedule 4, which supplement shall be countersigned by the President. The entity shall become a Member effective on the date the supplement is countersigned by the President.

(f) Entities whose applications contemplate expansion or rearrangement of the PJM Region may become Members promptly as described in Sections 11.6(c) and 11.6(e) above, but the integration of the applicant's system into all of the operation and accounting provisions of this Agreement and the Reliability Assurance Agreement, shall occur only after completion of all required installations and modifications of metering, communications, computer programming, and other necessary and appropriate facilities and procedures, as determined by the Office of the Interconnection. The Office of the Interconnection shall notify the other Members when such integration has occurred.

(g) Entities that become Members will be listed in Schedule 12 of this Agreement.

(h) In accordance with the MAAC Agreement, a Member serving load in the MAAC Control Zone shall be a member of MAAC and any other Member may be a member of MAAC.

11.7 Associate Membership Requirements.

(a) If any of the following conditions apply, an entity may qualify as an Associate Member:

(i) The entity is not a member of the End-Use Customer sector and has not been a Market Participant over the past six months, and has no verifiable plans to become a Market Participant over the next six months;

(ii) The entity does not meet the requirements of Section 11.6 of this Agreement;

(b) The following rights and obligations shall apply to Associate Members:

(i) Associate Members shall pay the one half of the annual membership fee, and the application fee is waived;

(ii) Associate Members may participate in all stakeholder process activities;

(iii) Associate Members shall not vote in any stakeholder activities, working groups or committees;

(iv) Associate Members shall not participate in any of PJM's markets;

(v) Associate Members may become Members if they meet the requirements of Section 1.24 of this Agreement;

notified Member may remedy such asserted breach by: (i) paying all amounts assertedly due, along with interest on such amounts calculated in accordance with the methodology specified for interest on refunds in FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii); and (ii) demonstration to the satisfaction of the Office of the Interconnection that the Member has taken appropriate measures to meet any other obligation of which it was deemed to be in breach; provided, however, that any such payment or demonstration may be subject to a reservation of rights, if any, to subject such matter to the PJM Dispute Resolution Procedures; and provided, further, that any such determination by the Office of the Interconnection may be subject to review by the PJM Board upon request of the Member involved or the Office of the Interconnection. If a Member has not remedied a breach by the 3rd business day following receipt of the Office of the Interconnection's notice, or receipt of the PJM Board's decision on review, if applicable, then the Member shall be in default and, in addition to such other remedies as may be available to the LLC:

i) A defaulting Market Participant shall be precluded from buying or selling in the PJM Interchange Energy Market, the PJM Capacity Credit Market, or any other market operated by PJM until the default is remedied as set forth above;

ii) A defaulting Member shall not be entitled to participate in the activities of any committee or other body established by the Members Committee or the Office of the Interconnection; and

iii) A defaulting Member shall not be entitled to vote on the Members Committee or any other committee or other body established pursuant to this Agreement.

15.2 Enforcement of Obligations.

If the Office of the Interconnection sends a notice to the PJM Board that a Member has failed to perform an obligation under this Agreement, the PJM Board shall initiate such action against such Member to enforce such obligation as the PJM Board shall deem appropriate. Subject to the procedures specified in Section 15.1, a Member's failure to perform such obligation shall be deemed to be a default under this Agreement. In order to remedy a default, but without limiting any rights the LLC may have against the defaulting Member, the PJM Board may assess against, and collect from, the Members not in default, in proportion to their Default Allocation Assessment, an amount equal to the amount that the defaulting Member has failed to pay to the Office of the Interconnection, along with appropriate interest. Such assessment shall in no way relieve the defaulting Member of its obligations. A Member that has paid such an assessment to the LLC shall have an independent right to seek and obtain payment and recovery from the defaulting Member of the amount of the assessment the Member paid to the LLC. In addition to any amounts in default, the defaulting Member shall be liable to the LLC for all reasonable costs incurred in enforcing the defaulting Member's obligations.

15.2.1 Collection by the Office of the Interconnection.

By vote at any Members Committee meeting, a majority of the Members that have paid a Default Allocation Assessment may request and appoint the Office of the Interconnection to act as agent on behalf of the Members that have paid a Default Allocation Assessment, solely for the purpose of pursuing and collecting any amounts so assessed; provided, however, that any Member that does not desire for the Office of the Interconnection to act on their behalf with regard to such collection shall so inform the Office of the Interconnection. In the event that the Office of the Interconnection is appointed as agent for the Members, the Office of the Interconnection shall be authorized to pursue collection through such actions, legal or otherwise, as it reasonably deems appropriate, including but not limited to the prosecution of legal actions and assertion of claims on behalf of the affected Members in the state and federal courts as well as under the United States Bankruptcy Code; provided, however, that the Office of the Interconnection shall take no action on behalf of those Members that have requested that the Office of the Interconnection not act on their behalf. After deducting the costs of collection, any amounts recovered by the Office of the Interconnection on behalf of the affected Members shall be distributed to the Members who have paid their Default Allocation Assessment in proportion to the Default Allocation Assessment paid by each Member except those Members who informed the Office of the Interconnection that it should not act as their agent.

15.2.2 Default Allocation Assessment.

(a) "Default Allocation Assessment" shall be equal to (0.1(1/N) + 0.9(A/Z)), where:

N = the total number of Members, calculated as of five o'clock p.m. eastern prevailing time on the date PJM declares a Member in default, excluding *ex officio* Members, State Consumer Advocates, Emergency and Economic Load Response Program Special Members, and municipal electric system Members that have been granted a waiver under section 17.2 of this Agreement.

A = for Members comprising factor "N" above, the Member's gross activity as determined by summing the absolute values of the charges and credits for each of the Activity Line Items identified in section 15.2.2(b) of this Agreement as accounted for and billed pursuant to section 3 of Schedule 1 of this Agreement for the month of default and the two previous months.

Z = the sum of factor A for all Members excluding *ex officio* Members, State Consumer Advocates, Emergency and Economic Load Response Program Special Members, and municipal electric system Members that have been granted a waiver under section 17.2 of this Agreement.

The assessment value of (0.1(1/N)) shall not exceed $10,000 per Member per calendar year, cumulative of all defaults. If one or more defaults arise that cause the value to exceed $10,000 per Member, then the excess shall be reallocated through the gross activity factor.

(b) Activity Line Items shall be each of the line items on the PJM monthly bills net of load reconciliation adjustments and adjustments applicable to activity for the current billing month appearing on the same bill.

15.3 Obligations to a Member in Default.

The Members have no continuing obligation to provide the benefits of interconnected operations to a Member in default.

15.4 Obligations of a Member in Default.

A Member found to be in default shall take all possible measures to mitigate the continued impact of the default on the Members not in default, including, but not limited to, loading its own generation to supply its own load to the maximum extent possible.

15.5 No Implied Waiver.

A failure of a Member, the PJM Board, or the LLC to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such entity's right to assert or rely upon any such provisions, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.

15.6 Limitation on Claims.

(a) No claim seeking an adjustment in the billing for any service, transaction, or charge under this Agreement may be asserted with respect to a month, if more than two years has elapsed since the first date upon which the billing for that month occurred. PJM may make no adjustment to billing with respect to a month for any service, transaction, or charge under this Agreement, if more than two years has elapsed since the first date upon which the billing for that month occurred, unless a claim seeking such adjustment had been received by PJM prior thereto.

(b) For claims that arose prior to the effective date of Section 15.6 of this Agreement, the claimant shall have two years from the effective date to assert such claims.

16. LIABILITY AND INDEMNITY

16.1 Members.

(a) As between the Members, except as may be otherwise agreed upon between individual Members with respect to specified interconnections, each Member will indemnify and hold harmless each of the other Members, and its directors, officers, employees, agents, or representatives, of and from any and all damages, losses, claims, demands, suits, recoveries, costs and expenses (including all court costs and reasonable attorneys' fees), caused by reason of bodily injury, death or damage to property of any third party, resulting from or attributable to the fault,

SCHEDULE 12
PJM MEMBER LIST

330 Fund I, L.P.
Accord Energy LLC
A&C Management Group LLC
AES Beaver Valley LLC
AES Enterprise, Inc.
AES Ironwood, LLC
AES Red Oak, LLC
Air Liquide Industrial US, LP
Air Products & Chemicals, Inc.
Akula Energy, LLC
Alabama Power Company
ALEA POWER LLC
Allegheny Electric Cooperative, Inc.
Allegheny Energy Supply Company, LLC
ALLETE, Inc. d/b/a Minnesota Power
Alliant Energy Corporate Services, Inc.
Alpha Domestic Power Trading, LLC
Alpha Energy Master, Ltd.
Ameren Energy, Inc.
Ameren Energy Marketing Company
AmerGen Energy Company, L.L.C.
American Cooperative Services, Inc.
American Municipal Power-Ohio, Inc.
American PowerNet Management, L.P.
American Transmission Systems Inc.
Appalachian Power Company
Aquenergy Systems Inc.
Aquila, Inc. d/b/a Aquila Networks
ArcLight Energy Marketing, L.L.C.
Armstrong Energy Limited Partnership, LLLP
Associated Electric Cooperative, Inc.
Atlantic City Electric Company
Baltimore Gas and Electric Company
Bank of America N.A.
Barclays Bank PLC
Beacon Power Corporation
Bear Energy LP
Bell Trading Inc.
Benton Foundry, Inc.
BG Energy Merchants, LLC
BGE Home Products & Services, Inc.
Big Rivers Electric Corporation
Big Sandy Peaker Plant, LLC
Big TreeSoft Inc.

BJ Energy, LLC
Black Gemini Group, LLC
Black Oak Capital, LLC
Black Oak Energy, LLC
Black River Commodity Energy Fund LLC
Black River Commodity Fund, Ltd.
Blue Ridge Power Agency, Inc.
Blue Star Energy Services, Inc.
BM2, LLC
BOC Energy Services, Inc.
BOC Group, Inc. (The)
Borough of Chambersburg
Borough of Ephrata
Borough of Mont Alto
Borough of Pitcairn, Pennsylvania
Borough of Seaside Heights
Borough of Tarentum
BP Energy Company
Bridge Energy Traders
Brookfield Energy Marketing Inc.
Brookfield Power Piney & Deep Creek LLC
Buckeye Power, Inc.
Calpine Energy Management, L.P.
Calpine Energy Services, L.P.
Calumet Energy Team, LLC
Calvert Cliffs Nuclear Power Plant, Inc.
CAM Energy Trading LLC
Camp Grove Wind Farm, LLC
Cargill Power Markets, LLC
Carolina Power & Light Company
Carpenter Technology Corporation
Castlebridge Energy Group, LLC
CBK Group, LTD
CED Rock Springs, LLC
Celeren Corporation
Centaurus Energy Master Fund, LP
Central Virginia Electric Cooperative
Champion Energy, LLC
Chapeau, Inc. dba BluePoint Energy
Chien Energy, LLC
Cinergy Capital & Trading, Inc.
Cinergy Retail Sales, LLC
Citadel Energy Investments Ltd.
Citadel Energy Products LLC
Citigroup Energy Inc.
Citizen's Electric Company of Lewisburg, PA
City of Batavia, Illinois

City of Cleveland, Department of Public Utilities, Division of Cleveland Public Power
City of Dover, Delaware
City of Dowagiac
City of Geneva (The)
City of New Martinsville – WV
City of Naperville
City of Philippi – West VA
City of Rochelle
City Power Marketing, LLC
CMS Energy Resource Management Company
Cogentrix Virginia Leasing Corporation
Columbus Southern Power Company
Commercial Utility Consultants, Inc.
Commerce Energy Inc.
Commonwealth Chesapeake Company, LLC
Commonwealth Edison Company
Community Energy, Inc.
Conectiv Bethlehem, LLC
Conectiv Energy Supply, Inc.
Con Edison Energy, Inc.
ConocoPhillips Company
Consolidated Edison Company of New York, Inc.
Consolidated Edison Solutions, Inc.
Constellation Energy Commodities Group, Inc.
Constellation Energy Control and Dispatch, LLC
Constellation Energy Projects & Services Group, Inc.
Constellation NewEnergy, Inc.
Constellation Power Source Generation, Inc.
Consumers Energy Company
Continental Cooperative Services
Coral Power, L.L.C.
Cordova Energy Company LLC
Corona Power LLC
Covanta Delaware Valley, L.P.
Covanta Energy Group, Inc.
Covanta Essex Company
Covanta Union, Inc.
CPV MARYLAND, LLC
CPV WARREN, LLC
Credit Suisse Energy LLC
Credit Suisse (USA), Inc.
Crescent Ridge LLC
Customized Energy Solutions, Ltd.
Dayton Power & Light Company (The)
DB Energy Trading LLC
DC Energy LLC
DC Energy Mid-Atlantic, LLC

DEL LIGHT INC.
Delaware Municipal Electric Corporation
Delmarva Power & Light Company
D.E. Shaw Plasma Power, L.L.C.
Detroit Edison Company
Direct Energy Services, LLC
Division of the Public Advocate of State of Delaware
Dominion Energy Marketing, Inc.
Dominion Retail, Inc.
Domtar Paper Company, LLC
Downes Associates, Inc.
DPL Energy, LLC
DPL Energy Resources, LLC
DTE Energy Trading, Inc.
Duke Energy Carolinas, LLC
Duke Energy Fayette, LLC
Duke Energy Hanging Rock, LLC
Duke Energy Indiana, Inc.
Duke Energy Lee, LLC
Duke Energy Marketing America, LLC
Duke Energy Ohio, Inc.
Duke Energy Shared Services, Inc.
Duke Energy Trading and Marketing, L.L.C.
Duke Energy Washington, LLC
Duquesne Conemaugh LLC
Duquesne Keystone LLC
Duquesne Light Company
Duquesne Light Energy, LLC
Duquesne Power LLC
Dynegy Energy Services, Inc.
Dynegy Power Marketing, Inc.
Dyon, LLC
Eagle Energy Partners I, L.P.
East Coast Power Linden Holdings, L.L.C.
East Kentucky Power Cooperative
Easton Utilities Commission
ECONnergy Energy Company, Inc.
ECONnergy PA, Inc.
Edison Mission Marketing & Trading, Inc.
E.F. Kenilworth, Inc.
EFS Parlin Holdings, LLC
E Minus LLC
El Cap II, LLC
Elkem Metals Company-Alloy LP
El Paso Marketing, L.P.
Elwood Energy LLC

EME Homer City Generation, L.P.
Emera Energy Services, Inc.
Emporia Hydropower Limited Partnership
Energy America, LLC
Energy Analytics
Energy Authority, Inc. (The)
EnergyConnect, Inc.
Energy Cooperative Association of Pennsylvania
Energy Curtailment Specialists, Inc. (ECS)
Energy Endeavors, LLC
Energy International Power Marketing Corporation
Energy Investments, LLC
EnergyUSA – TPC Corp.
EnerNOC, Inc.
Enerwise Global Technologies, Inc.
Engage Energy America LLC
EPCOR Energy Marketing (US) Inc.
EPEX, Inc.
EPIC NJ/PA, L.P.
Exel Power Sources, LLC
Exelon Energy Company (The)
Exelon Generation Company, LLC
Fairless Energy, LLC
Fairway Dairy and Ingredients LLC dba Twin Cities Power Generation
FirstEnergy Solutions Corp.
Florida Power & Light Company
Florida Power Corporation dba Progress Energy Florida, Inc.
FMF Energy, Inc.
Forest Investment Group, LLC
Fortis Energy Marketing & Trading GP
FPL Energy Power Marketing, Inc.
Franklin Power LLC
Fulcrum Power Marketing L.L.C.
Galt Power, Inc.
Geneva Energy, LLC
Geneva Roth Holding LLC
Georgia Power Company
Gerdau Ameristeel Energy, Inc
Gexa Energy Illinois, LLC
Glacial Energy of New Jersey, Inc.
GLE Trading LLC
Global Energy Investments Group, LLC
Grant Energy, Inc.
Great Bear Hydropower, Inc.
Green Mountain Energy Company
Gulf Power Company
G&G Energy, Inc.
Hagerstown Light Department
Handsome Lake Energy, LLC

Harrison REA, Inc. – Clarkesburg, WV
HEEP Fund Inc.
Hess Corporation
Highlands Energy Group, LLC (The)
Hoosier Energy REC, Inc.
Horizon Power and Light, LLC
Horizon Wind Energy LLC
H-P Energy Resources, LLC
H.Q. Energy Services (U.S.), Inc.
Hudson Bay Energy Solutions, LLC
Hudson Energy Services, LLC
Icetec.com, Inc.
IDT Energy, Inc.
Illinois Citizens Utility Board
Illinois Municipal Electric Agency
Indiana Michigan Power Company
Indiana Municipal Power Agency
Industrial Metal Treating Corp.
Ingenco Wholesale Power, LLC
Innoventive Power LLC
ISG Sparrows Point LLC
Integrys Energy Services, Inc.
J. Aron & Company
Jack Rich, Inc. d/b/a Anthracite Power & Light Company
James River Cogeneration Company
Jersey-Atlantic Wind, LLC
Jersey Central Power & Light Company
JJR Power LLC
JP Morgan Ventures Energy Corporation
Jump Power, LLC
Kansas City Power & Light
Kasia C LLC
Katmai Energy, LLC
Kentucky Power Company
Keystone Energy Group, Inc.
Keystone Energy Partners, LP
KeyTex Energy LLC
Knedergy, LLC
Kuehne Chemical Company, Inc.
Kingsport Power Company
Koch Supply & Trading, LP
Legacy Energy Group, LLC (The)
Lehigh Portland Cement Company
Lehman Brothers Commodity Services, Inc.
Letterkenny Industrial Development Authority – PA

Liberty Electric Power, LLC
Liberty Power Corp., L.L.C.
Liberty Power Delaware, LLC
Liberty Power District of Columbia LLC
Liberty Power Holdings LLC
Liberty Power Maryland, LLC
Lighthouse Energy Trading Co., Inc.
Long Island Lighting Company d/b/a LIPA
Louis Dreyfus Energy Services L.P.
Louisville Gas and Electric Company/Kentucky Utilities Company
Lower Electric, LLC
Lower Mount Bethel Energy, LLC
LSP-Kendall Energy, LLC
Luminant Energy Company LLC (d/b/a Luminant Energy)
Mac Trading, Inc.
Macquarie Cook Power Inc.
Madison Gas and Electric Co.
MAG Energy Solution, Inc.
Major Lending, LLC
Marina Energy, LLC
Marquette Energy, LLC
Maryland Office of People's Counsel
MD Energy Group, LLC
MeadWestvaco Corporation
Merrill Lynch Commodities, Inc.
Metropolitan Edison Company
Metropolitan Energy, L.L.C.
Miami Valley Lighting, LLC
MidAmerican Energy Company
MidAtlantic Power Partners
Middlesex Generating Co., L.L.C.
Midwest Generation Energy Services LLC
Midwest Generation, LLC
Minnesota Municipal Power Agency
Mirant Energy Trading, LLC
Mirant Potomac River, LLC
Mirant Power Purchase, LLC
Mississippi Power Company
Monongahela Power Company d/b/a/ Allegheny Power
Morgan Stanley Capital Group, Inc.
Morris Cogeneration, L.L.C.
Mt. Carmel Cogeneration Inc.
MXEnergy Electric, Inc.
NCSU Energy, Inc.
NedPower Mount Storm, LLC
Neptune Regional Transmission System, LLC

New Jersey Division of the Ratepayer Advocate
Newmarket Power Company, LLC
New York Power Authority
New York State Electric & Gas Corporation
North America Power Partners LLC
North American Energy Credit and Clearing-Contract Merchant LLC
North American Energy Credit and Clearing-Delivery LLC
Northeast Maryland Waste Disposal Authority
North Carolina Electric Membership Corporation
North Carolina Municipal Power Agency Number 1
Northeast Utilities Service Company
Northern Indiana Public Service Company
Northern States Power Company
NorthPoint Energy Solutions, Inc.
NRG New Jersey Energy Sales LLC
NRG Power Marketing, Inc.
NYSEG Solutions, Inc.
Occidental Power Marketing, L.P.
Occidental Power Services, Inc.
Ocean Peaking Power, LLC
Ocean Power LLC
Office of the People's Counsel for the District of Columbia
Ohio Consumer's Counsel
Ohio Power Company
Ohms Energy Company, LLC
Old Dominion Electric Cooperative
Olympus Power, LLC
Ontario Power Generation Inc.
Ontelaunee Power Operating Company, LLC
Orion Power Midwest, L.P.
Ormet Primary Aluminum Corporation
Otter Tail Corporation d/b/a Otter Tail Power Company
Palama, LLC
Panda Power Corporation
Parma Energy LLC
Pattern Recognition Technologies, Inc.
PECO Energy Company
Pedricktown Plant Holdings, LLC
PEI Power Corporation
PEI Power II, LLC
Pennsylvania Electric Company
Pennsylvania Office of Consumer Advocate
Peoples Energy Services Corporation
Pepco Energy Services, Inc.
PG Energy Services Inc. d/b/a/ PG Energy Power Plus

Pillar Fund LLC
Pilot Power Group, Inc.
PJS Capital, LLC
Pleasants Energy, LLC
Potomac Edison Company (The) d/b/a/ Allegheny Power
Potomac Electric Power Company
Potomac Power Resources, Inc.
Power Edge LLC
Powerex Corporation
PPL Brunner Island, LLC
PPL Electric Utilities Corporation dba PPL Utilities
PPL EnergyPlus, LLC
PPL Holtwood, LLC
PPL Martins Creek, LLC
PPL Montour, LLC
PPL Susquehanna, LLC
PPL University Park, LLC
PPM Energy, Inc.
Praxair, Inc.
Premcor Refining Group, Inc. (The)
Procter & Gamble Paper Products Company (The)
Progress Energy Ventures, Inc.
PSEG Energy Resources & Trade LLC
Public Service Electric and Gas Company
Pure Energy, Inc.
Quiet Light Trading, LLC
QVINTA, Incorporated
Rainbow Energy Marketing Corporation
RC Cape May Holdings, LLC
Reliant Energy Aurora, LP
Reliant Energy Electric Solutions, LLC
Reliant Energy Hunterstown, LLC
Reliant Energy Power Supply, LLC
Reliant Energy Services, Inc.
Reliant Energy Seward, LLC
Reliant Energy Solutions East, LLC
Reliant Energy Wholesale Generation, LLC
Richards' Energy Group (The)
Riverside Generating Company, L.L.C.
Rochester Gas and Electric Corporation
Rockland Electric Company
Rolling Hills Generating, L.L.C.
Round Rock Energy, LLC
RPL Holdings, Inc.
RTP Controls, Inc.

R&R Energy, Inc.
S.A.C. Energy Investments, L.P.
Safe Harbor Water Power Corporation
Safeway Inc.
Saracen Energy LP
Saracen Merchant Energy, LP
SAWB Energy, LLC
Schuylkill Energy Resources, Inc.
Select Energy, Inc.
Select Energy New York, Inc.
Sempra Energy Solutions
Sempra Energy Trading LLC
Sempra Generation
SESCO ENTERPRISES LLC
Sheetz, Inc.
Sierra Power Asset Marketing, LLC
SIG Energy, LLLP
Silverhill, Ltd.
Sithe Power Marketing, L.P.
Societe Generale Energie (USA) Corp
Solios Power LLC
South Carolina Electric & Gas Company
Southeastern Chester County Refuse Authority
Southeastern Power Administration
Southern Power Company
Southern Maryland Electric Cooperative, Inc.
South Jersey Energy Company
South Jersey Energy Solutions, L.L.C.
Spark Energy, L.P.
Split Rock Energy LLC
SR Energy, LLC
SRM Investment LLC
Strategic Energy L.L.C.
SUEZ Energy Marketing NA, Inc.
SUEZ Energy Resources NA, Inc.
Sugar Creek Power Company, LLC
Sunbury Generation, L.L.C.
SunCoke Energy, Inc
Sunoco, Inc. (R&M)
Sunoco Power Marketing, L.L.C.
Target Corporation
TEC Trading, Inc.
Telemagine, Inc.
Tenaska Power Services Co.
Tenaska Virginia Parners, L.P.

Tennessee Valley Authority (The)
TFS Capital LLC
Thurmont Municipal Light Company
Town of Front Royal, Virginia
Town of Williamsport
Trans-Allegheny Interstate Line Company
TransAlta Energy Marketing (US) Inc.
TransMarket Group LLC
Treewalk LLC
UBS AG, acting through its London Branch
UGI Development Company
UGI Energy Services, Inc.
UGI Utilities, Inc.
University Park Energy, LLC
Upper Peninsula Power Company
USEG, LLP
Upstate Energy Trading
UtiliTech, Inc.
Utility Advantage, LLC
Valero Power Marketing, LLC
Velocity Futures, LP
Vineland Municipal Electric Utility
Virginia Division of Consumer Counsel
Virginia Electric and Power Company
Virginia State Corporation Commission
Wabash Valley Power Association, Inc.
Washington Gas Energy Services, Inc.
Webenergy.net, Inc. d/b/a Consumer Powerline
Wellsboro Electric Company
Westar Energy, Inc.
Westbank Energy Capital, LLC
West Penn Power Company d/b/a/ Allegheny Power
Wheeling Power Company
Williams Gas Marketing, Inc.
Williams Generation Company – Hazelton
Wisconsin Electric Power Company
Wisconsin Public Power, Inc.
Wisconsin Public Service Corporation
Wolf Hills Energy, LLC
Wolverine Power Supply Cooperative, Inc.
Wolverine Trading, LLC
WPS Westwood Generation, LLC
Xtend Energy, Inc.
York Generation Company LLC
Yuma Power Limited Liability Company

EXHIBIT B

PJM OPEN ACCESS

TRANSMISSION TARIFF

The language reflected in *italics* is accepted by the Commission, however, because of when it was filed, accepted by the Commission, and/or effective, it is subject to a clean-up filing in accordance with Order No. 614.

The following sheets reflect all revisions approved by FERC in orders issued through March 25, 2008, and all revisions from compliance filings submitted through March 25, 2008, as well as clean up revisions to: (1) incorporate language accepted by FERC in prior versions of the Tariff, but not previously integrated into the current effective pages; and (2) correct minor typographical and formatting errors.

K:\pjm\Current Effective Agreements\Stripped Current Effectives\PJM Tariff 3-25-08.DOC

I. COMMON SERVICE PROVISIONS

1 Definitions

1.01 Abnormal Condition: Any condition on the Interconnection Facilities which, determined in accordance with Good Utility Practice, is: (i) outside normal operating parameters such that facilities are operating outside their normal ratings or that reasonable operating limits have been exceeded; and (ii) could reasonably be expected to materially and adversely affect the safe and reliable operation of the Interconnection Facilities; but which, in any case, could reasonably be expected to result in an Emergency Condition. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not, standing alone, constitute an Abnormal Condition.

1.0A Affected System: An electric system other than the Transmission Provider's Transmission System that may be affected by a proposed interconnection or on which a proposed interconnection or addition of facilities or upgrades may require modifications or upgrades to the Transmission System.

1.0A.01 Affiliate: With respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

1.0B Affected System Operator: An entity that operates an Affected System or, if the Affected System is under the operational control of an independent system operator or a regional transmission organization, such independent entity.

1.1 Ancillary Services: Those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider's Transmission System in accordance with Good Utility Practice.

1.2 Annual Transmission Costs: The total annual cost of the Transmission System for purposes of Network Integration Transmission Service shall be the amount specified in Attachment H for each Zone until amended by the applicable Transmission Owner or modified by the Commission.

1.2.01 Applicable Laws and Regulations: All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the relevant parties, their respective facilities, and/or the respective services they provide.

1.2A Applicable Regional Reliability Council: The reliability council for the region in which a Network Customer, Transmission Customer, Interconnection Customer, or Transmission Owner operates.

EXHIBIT C

ATTORNEYS AT LAW

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January 18, 2008

Ms. Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A
Washington, D.C. 20426

2008 JAN 18 P 2:12

Re: PJM Interconnection, L.L.C., Docket No. ER08-455-000

Dear Ms. Bose:

PJM Interconnection, L.L.C. ("PJM"), pursuant to section 205 of the Federal Power Act, 16 U.S.C. § 824d, submits for filing a change to the default allocation provisions of the PJM Operating Agreement to be applicable only in those very limited circumstances when: (1) a market participant establishes multiple affiliates to trade Financial Transmission Rights ("FTRs") and (2) the market participant isolates a particular type of high-risk FTR position in one of these affiliates, which then defaults on such position. Where one of a group of affiliates defaults in its obligations arising from a "net short" FTR portfolio — a risky uncovered short position in FTRs — PJM's rights upon the default would be supplemented with (1) a limited right to set the default off against FTR market revenues that would otherwise be due from PJM to affiliates of the defaulting party, and (2) a limited right to apply such affiliates' posted security to the extent that security relates to its FTR positions.

This rule change will not affect market participant activity, or security posted with respect to market participant activity, in any other PJM market. Energy revenues, transmission revenues, ancillary service revenues, and capacity market revenues will be unaffected by the rule change.

As explained in this filing, this change is needed to ensure that the allocation of the costs of defaults among PJM Members remains just and reasonable, and to foreclose any opportunity for market participants to game the current default allocation rule and shift the risk of uncovered short FTR trades to other PJM Members. As also shown in this filing, the exposure to other PJM Members from this gaming opportunity cannot and should not be addressed solely through credit and security provisions, which potentially would raise an insurmountable barrier to participation in the FTR markets. Revising the rules on the allocation of the cost of defaults provides a more targeted solution to the problem, as this solution would be triggered only by an actual default, and only in the narrow circumstances described in this filing.

Aside from the prophylactic nature of this rule change, absent the requested modification, defaults expected to occur over the next six months on the net short FTR portfolio of one PJM Member will likely force the other PJM Members to bear tens of millions of dollars to cover the non-payments. A portion of these future defaults — close to $20 million — may occur as early as next week with respect to this Member's FTR portfolio. Therefore, to mitigate the harm to the PJM Members, PJM asks that the Commission make the enclosed changes effective upon one day's notice.

I. Description of Filing

A. Description of Change to the PJM Operating Agreement

Under the current Operating Agreement, when a member is in payment default, PJM assesses the amount in default against all PJM Members.[1] PJM is revising this rule to provide that, before assessing the default against all Members, PJM will have a limited right of set-off against payments owed to Affiliates of the defaulting entity, and a right to use Affiliates' security, in certain narrow circumstances. In cases where the default arises because the defaulting Member holds a "net short portfolio" of FTR positions, i.e., an uncovered short bet that a path will experience less congestion than expected, PJM would (i) set-off such amounts due and owing to PJM against any amounts otherwise owed to such defaulting Member's Affiliate and/or (ii) apply any Financial Security posted by such defaulting Member's Affiliate[2] to meet the Member's payment obligation, but only as to the amounts otherwise owed to, or the Financial Security posted by, the Affiliate arising from its activity in PJM's FTR markets.[3] For purposes of this provision, a "net short portfolio of FTR positions" results when a member (1) acquires FTR positions in an annual FTR auction that have a net negative value in such auction; or (2) acquires in any monthly, quarterly, or balance-of-period auction FTR positions that have a net negative value in such

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1 Operating Agreement, section 15.2.

2 "Affiliate" is as defined in section 1.2 of the Operating Agreement; "Financial Security" is as defined in section VII of Attachment Q of the PJM Open Access Transmission Tariff.

3 Where there is more than one such Affiliate, PJM would be permitted to set-off amounts owed to PJM by the defaulting Member against amounts due to such Affiliates, or apply Financial Security posted by any or all such Affiliates, in full or in part as necessary to remedy the default in whole or in part.

auction, which when considered with the rest of the Member's FTR portfolio results in a net negative value for the entire portfolio; or (3) acquires through a bilateral transaction reported to PJM, FTR positions that have a net negative value at the time acquired, which when considered with the rest of the Member's FTR portfolio results in a net negative value for the entire portfolio.[4]

B. The Proposed Change Is Just and Reasonable

1. *Background*

a. FTRs, Counterflow FTRs, and Undiversified Portfolios

FTRs in PJM are valued based on the expected differences between the energy prices at the FTR's designated source point and the energy prices at its designated sink point over the life of the FTR. Based on those values, FTRs can be classified as prevailing-flow FTRs or counterflow FTRs. But it is important to recognize that FTRs are a single market product, regardless of flow direction. PJM does not conduct separate auctions for FTRs depending on whether they are prevailing-flow or counterflow; such an auction design would not be feasible because it would unreasonably restrict market participant choices in the auction regarding the FTRs they wish to hold, and it would require PJM to predict whether a particular FTR will be prevailing-flow or counterflow. Market participants, not PJM, should make these decisions through their bids in the FTR auctions.

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4 For purposes of scenarios 2 and 3, the value of the rest of Member's FTR portfolio is based on the results of the most recent FTR auction, i.e., the auction in which the member required additional FTRs in scenario 2, or the FTR auction last preceeding the bilateral acquisition in scenario 3.

An FTR is a prevailing-flow FTR when its source price is lower than its sink price, indicating that the FTR consumes valuable transmission flow capability relative to projected transmission constraints. A prevailing-flow FTR has a positive purchase price, or charge, that the purchaser commits to pay in the FTR auction. A prevailing-flow FTR is expected to yield a positive revenue stream to the FTR holder based on its economic value in PJM's Day-ahead energy market.

By contrast, an FTR is a counterflow FTR when its source price is higher than its sink price, indicating that the FTR releases valuable transmission flow capability by providing flow in the opposite direction relative to a transmission constraint. A counterflow FTR has a negative purchase price, reflecting that the auction participant will be paid some amount to take on the costs and risks of holding a counterflow FTR.[5] A counterflow FTR is expected to result in a negative revenue stream (i.e., a payment obligation) to the FTR holder based on its economic value in the Day-ahead energy market.

A prevailing-flow FTR holder will incur a monthly charge for purchasing an FTR in the annual or monthly auction. The FTR holder then expects to receive revenues in the Day-ahead energy market based on the value of the FTR as determined by locational marginal price ("LMP") differences between the FTR source and sink. For load-serving entities, these FTR revenues will in turn offset any congestion charges that may be paid by the market participant for delivering energy to its load in the Day-ahead energy market. Similarly, a counterflow FTR holder can use a forward purchase of an FTR to

[5] A party that is paid in an FTR auction to take counterflow is akin to a party selling a put in an options market.

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hedge a counterflow energy delivery in the Day-ahead market. In this case, the FTR holder will receive a monthly credit for acquiring a counterflow FTR in the annual or monthly auction. This FTR holder then expects to pay congestion charges in the Day-ahead energy market based on the value of the FTR as determined by LMP differences between the FTR source and sink. For load-serving entities, these FTR-based congestion charges will in turn be offset by any congestion credits that may be paid to the market participant for delivering energy to its load that results in flow opposite the constrained flow in the Day-ahead energy market.

Companies that purchase and sell FTRs solely to arbitrage the price differences between FTR auctions or between the FTR auction and the Day-ahead energy market tend to be financial market participants with sophisticated risk management departments to control their financial exposure. These market participants are not motivated to match energy deliveries with FTR positions because they have no load serving responsibility. Rather, their open FTR positions will generate revenue if their forward FTR purchases are well managed. Since FTRs and transmission congestion charges are quite volatile and their FTR positions may not be matched with energy deliveries, most financial participants maintain a balanced portfolio of prevailing flow and counterflow FTRs to manage their risk appropriately. Many financial participants also offset their FTR positions by engaging in virtual bid and offer activity in the Day-ahead energy market.

Prevailing flow FTR positions tend to be profitable when actual congestion charges in the Day-ahead energy market are higher than the expected congestion charges. Counterflow FTR positions tend to be profitable when actual congestion charges in the Day-ahead energy market are lower than the expected congestion charges. Since actual

congestion charges can be impacted by unexpected events, most financial participants have diverse portfolios of both prevailing-flow and counterflow FTRs, coupled with virtual energy positions in order to limit their financial exposure and manage their overall risk.

A net short FTR portfolio is an FTR portfolio that contains more counterflow FTRs than prevailing-flow FTRs, based on expected dollar values. Therefore, its net value as indicated by FTR auction clearing prices is negative. A net short FTR portfolio is more risky than a balanced portfolio because it is exposed to the volatility of changing congestion (in particular, the risk of increased congestion) without a hedge or offset from prevailing-flow FTRs. Thus, rather than serving a risk-management function, a net short FTR portfolio is a speculative bet that congestion on a particular path or paths will be less over the life of the FTRs than is expected at the time of the auction. While parties that choose to hold such positions serve a useful purpose by providing additional liquidity to the auction, they undertake above-average market risk. The parties that elect to undertake such risks are a distinct minority of PJM market participants; at present, only a few dozen PJM market participants hold net short portfolios of FTR positions.[6]

b. Defaults and Default Assessments

Under the current Operating Agreement, if a Member is in default of a payment obligation, PJM may assess against, and collect from, the Members not in default an amount

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6 About 25 member accounts had net short portfolios in the most recent annual auction. About 27 additional member accounts had net short positions in subsequent monthly and quarterly auctions.

equal to the amount a defaulting Member fails to pay to PJM, with interest.[7] The unpaid amount is apportioned among the Members based on their Default Allocation Assessment, which is a formula that allocates 10% of the amount in equal shares to all Members (except those that have been granted a waiver) and 90% in proportion to each Member's billing activity (the absolute value of both charges and credits) for the month of default and the two previous months.[8] This formula assesses most of the default against the Members with the highest billing activity, typically those Members serving the most load or responsible for the most generation. Thus, as the Commission has noted, in RTO markets, "the credit/default risk of undercapitalized market participants lies with the non-defaulting participants."[9] For this reason, the Commission encourages RTOs to adopt policies that "reduce the risk [to the RTO and its members] of exposure in the event of default" while at the same time ensuring that credit or collateral requirements "are not so stringent that they unnecessarily inhibit access to the marketplace."[10]

While Affiliates are treated as a single Member for certain purposes under the Operating Agreement, such as voting,[11] PJM's default allocation assessment rules do not currently treat Affiliates of a defaulting Member differently from any other PJM Members.

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7 Operating Agreement, section 15.2.

8 Operating Agreement, section 15.2.2.

9 <u>Policy Statement on Credit-related Issues for Electric OATT Transmission Providers, Independent System Operators and Regional Transmission Organizations</u>, 109 FERC ¶ 61,186, at P 17 (2004) ("Credit Policy Statement").

10 <u>Midwest Indep. Transmission Sys. Operator, Inc.</u>, 115 FERC ¶ 61,296, P 16 (2006).

11 <u>See, e.g.</u>, section 8.4(b) of the Operating Agreement.

Therefore, a single party currently may manipulate PJM's rules by forming multiple Affiliates for purposes of trading in FTRs, segregating positions that present a certain risk profile in one Affiliate, and housing positions that present an offsetting risk profile in its other Affiliates. At settlement, whichever Affiliate holds the in-the-money positions will be entitled to payments from PJM, while the Affiliate holding the opposite position will owe PJM payment. If the out-of-the-money Affiliate fails to make payments, under current rules, this risk is borne by the other PJM Members, through the default allocation assessment provisions. Unique characteristics of the FTR markets, as discussed below, challenge the application of PJM's current credit risk management and default allocation rules.

2. *The Current Rules Must Be Changed*

PJM is bringing this change to the Commission under section 205 of the Federal Power Act to remedy a loophole that allows a form of gaming of PJM's current credit and default allocation rules. The loophole enables a market participant to force Members simultaneously to pay out FTR revenues to a party, while also covering that party's losses (incurred through a commonly-owned corporate entity), yielding a result that is unjust and unreasonable under the Federal Power Act.

As explained above, PJM's current default allocation rules allow a market participant to establish one Affiliate to make risky bets on future levels of congestion through net short FTR positions (i.e., more counterflow FTRs than prevailing-flow FTRs), while setting up other Affiliates to hold offsetting FTR positions that could otherwise hedge or diversify the short portfolio. If the market participant's bet on counterflow FTRs proves incorrect, the Affiliate that undertook that risk can default and

walk away, leaving the other PJM Members to cover the default, while the market participant's other Affiliates continue to earn revenues from their FTR positions. By contrast, if all of the market participant's FTR trades, counterflow and prevailing-flow, were housed in one Member company, there would be no such shifting of risk, as the diverse FTR positions would hedge one another in PJM's monthly settlements.

Therefore, market participants' ability to choose a corporate structure that isolates their risky trades, coupled with the current default allocation rules, unreasonably exposes PJM Members to potential costs from defaults due to high-risk trades. This exposure is particularly high in the area of market participants' acquisitions of counterflow FTRs, which are uncovered, short sales of FTRs. As explained above, prevailing-flow FTRs entitle the holder to an anticipated monthly revenue stream, but counterflow FTRs instead commit the holder to a series of payment obligations to PJM. The party taking an FTR counterflow is betting that the amount it receives through the FTR auction will exceed the monthly congestion payments it will be required to make. But if it guesses incorrectly, and congestion is greater than expected, its payment obligations could be virtually unlimited.[12] The payments the counterflow FTR holder must make are based on nodal price differences calculated every day over the life of the FTR. If it turns out that there is greater congestion than the trader expected on the FTR path for an extended period, due, for example, to an extended transmission outage, then the price differences could be

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12 Again, the parallel is to shorting an equity or commodity, where the price of that equity or commodity can rise infinitely.

substantial, and the cumulative obligations as those differences persist quickly could overwhelm a trader's ability to pay.[13]

The exposure arising from risky net short FTR portfolios is also significantly different from credit exposures that arise in other PJM markets. The FTR market is, in some important respects, a forward market. The FTR market calls for performance in the future; but because the forward obligation does not trade and settle daily there is no settled price by which to "mark to market" the FTR position. FTRs are bought and sold in periodic auctions for monthly, quarterly, or yearly periods. The forward market does not settle daily and there is no published daily price or index valuing forward delivery. Once the FTR is purchased, the holder is committed to its position for the remaining term, unless it can bilaterally find another market participant to assume its position. There is no ready market, or readily available price, upon which the holder can rely to liquidate a poor position before it worsens further.[14]

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13 For example, at least in theory, one might predict zero congestion on an FTR path between two points, but the price difference between the two points, as a result of an unexpected outage or multiple outages, while unlikely, could turn out to be \$1,000 per megawatt per hour, or \$24,000 per megawatt per day, or \$720,000 per megawatt per month. If the trader purchased 1,000 megawatts of such counterflow FTRs (one participant discussed below that is expected to default in fact holds over 13,000 MW of counterflow FTRs), the exposure could be \$720,000,000! While this is an extreme example, a lesser exposure of tens or several hundred millions is not far-fetched. In contrast, prevailing-flow FTRs, which might be predicted, for example, to produce congestion revenues to a holder of say \$50 per megawatt, cannot produce revenues below zero, and thus limit the holder's exposure to a loss of the limited \$50 per megawatt that he bet (if instead, congestion moves higher, the holder is paid rather than experiencing losses that it needs to cover).

14 PJM expects to explore with its stakeholders in the near future more sophisticated tools to allow PJM to close-out and liquidate forward FTR positions, but such (...continued)

In addition, unlike other forward commodity markets, the FTR market is entirely financial; there is no physical product associated with FTRs. Thus, there is no way to unwind loss positions through the sale of a physical product in an active and liquid commodity market, as in more typical commodities markets.[15]

3. *The Proposed Operating Agreement Changes Are Narrowly Tailored to Address the Exposure from Net Short FTR Positions*

The enclosed changes to the Operating Agreement's default assessment provisions are narrowly tailored to remedy the potentially unjust and unreasonable consequences of the current provision as applied to companies that establish multiple affiliates to trade in the PJM FTR markets. While market participants may establish affiliated companies to suit their business purposes, the current rules enable market participants to manipulate the rules, shifting the risk of counterflow FTR trades from the party that initiated such trades to the other PJM Members, when multiple affiliates are established to trade in the FTR markets. The current backstop provided by the default assessment to the Members can be gamed easily by FTR traders to shift the risk of

(continued…)

tools are expected to have modest value given the lack of daily market settlements.

15 Because counterflow FTRs are purely financial, they differ from other PJM forward markets, such as the three-year forward capacity market. Sellers in the Reliability Pricing Model ("RPM") auctions can submit offers based only on identified capacity, demand response, or transmission resources that meet criteria designed to ensure the availability of those resources during peak periods. In addition, there are no buyers in the forward RPM auctions, which are cleared using an administratively determined demand curve that determines prices that will be paid by load-serving entities for the capacity in the delivery year.

particularly risky FTR trades to the other PJM Members, rather than hedging their own positions by entering into a balanced FTR portfolio.

PJM's proposed cure for this problem is as surgical as possible to address just the problem of market participants isolating risky net short portfolios of FTRs in one of a group of related companies.[16] In particular, the proposed change to the default assessment rules applies (1) only in cases of actual defaults from net short portfolios of FTRs, (2) only to parties that have chosen to separate their FTR trades among multiple entities, and (3) only to the extent of security posted and revenues owed to Affiliates of the defaulting Member associated with their trades in FTRs.[17] PJM has also included an important exception for load serving entities. Revenues from self-scheduled FTRs are

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16 As noted, there currently are several dozen Members that hold net short portfolios of FTR positions, many of which have Affiliates that also trade in the FTR markets. As detailed below, one of those Members defaulted on a payment obligation in December, 2007, and is likely to default again on newly arising payment obligations next week and over the next four months. These facts demonstrate that the scenario of concern, while infrequent, can occur, has occurred, and could occur again with Members other than the Member now in default.

17 The definition of a net short portfolio of FTR positions limits the rule to those market participants that purchase an FTR portfolio that has a net negative value, or that acquire net negative FTR positions in later auctions (or bilaterally) when the result is that their entire portfolio has a net negative value. Thus, the rule would not apply to a market participant that, for example, buys a long position in the annual auction, which becomes short as a result of unexpected congestion changes, and then buys additional long positions to cover. Nor would the rule apply to a market participant that acquires negative positions in a subsequent auction to partially hedge its existing long positions, because the total portfolio would not have a net negative value. The proposed change is not intended to deter or penalize such legitimate hedging, as allowing such hedging is the essential purpose of PJM's FTR rules. Gauging whether the portfolio is net negative as of the time the market participant acquires counterflow FTRs also properly limits the rule's application to those market participants that intentionally take on the risks of uncovered short FTR positions.

excluded from the operation of the modified default allocation rule, because they arise from Auction Revenue Rights that are specifically allocated to load-serving entities for the express purpose of hedging their exposure to congestion on historic paths. This exclusion is analagous to the existing exclusion of such self-scheduled FTRs from the calculation of an FTR auction participant's credit requirement.[18]

The Commission regularly considers and determines the just and reasonable default allocation rules for ISOs and RTOs.[19] Assessing a default first against the defaulting party's affiliates is reasonable in the narrow circumstances described in this filing. To keep itself whole, PJM must assess any default against other Members (i.e., other than the defaulting Member);[20] the question here is the just and reasonable approach for identifying the other Members that should bear this cost. Where a single company chooses to form multiple Affiliates to trade FTRs, and chooses to isolate its risky counterflow FTR positions in one of those Affiliates, it is more just in these narrow circumstances to recoup the default from the Affiliates (to the extent of their FTR

18 See Operating Agreement, Schedule 1, section 7.1.1(b).

19 See, e.g., PJM Interconnection, L.L.C., 109 FERC ¶ 61,366 (2004); PJM Interconnection, L.L.C., 104 FERC ¶ 61,321 (2003); New York Independent Transmission System Operator, Inc., 104 FERC ¶ 61,311, at PP 11, 61 (2003).

20 In "socializing" a Member's default, the current default allocation rules already operate to impose a portion of such defualt on such Member's affiliates doing business in the PJM Market. Indeed, in the case of the expected Power Edge defaults (discussed infra), PJM's current rules will impose a small portion of that default on each of Power Edge's affiliates active in PJM. The proposed rule builds on this existing authority to create (in the limited circumstances described) a two-tiered default allocation methodology that more heavily weights a Member's default allocation to its affiliates before allocating any unsatisfied balance of the default to the rest of the membership.

activity) than to impose all of the costs on Members that are completely unrelated to the defaulting Member and had no role in or control over the conduct that gave rise to the default.[21]

Because the forward aspects of FTR markets present unique risks that are not susceptible to sufficient mitigation through PJM's credit rules, the proposed affiliate default assessment rules are not needed to address credit risks arising in other PJM markets. And because the objective is to replicate what would have occurred had a market participant housed its counterflow FTR portfolio with its other FTR activity, PJM

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21 The Commission is entitled to consider corporate relationships when exercising its discretion to determine a just and reasonable allocation of costs, which "is not a matter for the slide-rule" but "involves judgment on a myriad of facts." Colorado Interstate Gas Co. v. FPC, 324 U.S. 581, 589 (1945). Indeed, in a variety of circumstances, the Commission has held that it may treat affiliates in a coordinated manner where it determines that the corporate form functions to frustrate statutory or regulatory purposes or where the Commission finds it would be in the interest of public convenience, fairness, or equity. See, e.g., KansOk Partnership, 73 FERC ¶ 61,160, at 61,484-85 (1995) ("the Commission recognizes the separate, nonjurisdictional status of affiliated companies that would be jurisdictional if they were combined in a single company" but "where it is necessary to protect the public interest, [the Commission] will disregard the separate corporate status of entities that would otherwise be considered nonjurisdictional"); San Diego Gas & Elec. Co., 111 FERC ¶ 61,475, at PP 14-16 (2005) (the Commission required Puget Sound Energy, Inc. to present its affiliates' actual costs of fuel rather than rely upon spot gas prices indices that the Commission determined were not a reliable indicator of actual gas costs); San Diego Gas & Elec. Co., 108 FERC ¶ 61,311, at P 25 (2004) (the Commission found Mirant's arguments to treat its various affiliates separately to be unpersuasive in the context of calculating refunds, explaining that the purpose of ignoring intra-corporate transactions or valuations is to best determine each claimant's actual fuel costs by eliminating any issues of potential affiliate abuse). See also Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890-A, 121 FERC ¶ 61,297, at P 1039 (2007) (establishing presumption that affiliates' market-based rate authority should be suspended when transmission owner affiliate violates its tariff).

is limiting the offset to the FTR revenues otherwise owed to the Affiliates, and only the FTR-related security posted by the Affiliates.

Thus, the rule change will not affect market participant activity, or security posted with respect to market participant activity, in any other PJM market. Energy revenues, transmission revenues, ancillary service revenues, and capacity market revenues will be unaffected by the rule change.

4. *Reasonable Changes in Credit and Security Requirements Cannot Provide Sufficient Protection Against the Risk of Defaults from Net Short FTR Portfolios*

On December 26, 2007, PJM filed changes in Docket No. ER08-376-000 to its credit policy in part to address collateral requirements for FTR counterflow positions ("December 26 Filing"). In that filing, PJM proposed to set the credit requirement for FTR-holders each month, based on monthly historical values. To provide a cushion against deviations from historical experience, PJM proposed a ten percent adder to the historical values for counterflow positions. PJM recognized in that filing, however, that more would be needed. As PJM explained, "[a]ny credit system that uses historical or anticipated values as an offset to cost obligations is subject to the risk that past experience will prove a faulty guide to the future."[22] PJM underscored this point with the example of an FTR market participant that defaulted in September 2007 on a $2.3 million payment obligation. PJM's FTR credit rules at the time the market participant acquired the FTR position required it to back its portfolio of bids with only $3,000 of credit; whereas the change proposed in Docket No. ER08-376 would have required the customer

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22 December 26 Filing, Transmittal Letter at 7.

to post approximately $1 million to back those same positions. While this is a substantial improvement, it still leaves the other PJM Members exposed to the risks of substantial costs in the event of default. PJM advised in that filing that its staff was convinced "based on their experience with defaults associated with undiversified counterflow positions that additional measures are necessary," which PJM stakeholders would consider early in 2008. Id.

The PJM members are expected to approve next week additional enhancements to the credit policy to address some of the concern. PJM intends to address directly the risk of net short FTR portfolios to require additional security for these positions. It plans to require as security two times the value (as determined in the FTR auction clearing) of any such portfolio of FTRs, and in some cases (where the portfolio also is geographically undiversified and susceptible to the risk of a single outage), three times the value of the portfolio.

Nonetheless, these enhancements to the credit policy still will not protect against the entire exposure that net short FTR positions can produce, or the associated risk of defaults. As indicated in the December 26 Filing, an FTR credit requirement's reliance on historical congestion levels is reasonable, but has an inherent shortcoming: congestion is volatile and may be greater on a given path than recent history would suggest. Any number of factors, including but not limited to transmission outages, could cause one or both prices at two distinct locations to vary, increasing the differences between those two prices to greater levels, for a longer time, than experienced in the three most recent years. Similarly, although PJM will seek to enhance security by requiring two or, in some cases, three times the value of a short portfolio, the exposure can be far

greater than even these amounts. See footnote 13, supra. Simply put, when an unhedged bet against congestion goes bad, it can go very bad.

But to raise up-front financial security requirements to cover all hypothetical risk, in a manner well beyond that proposed in both the December 26 Filing and the forthcoming filing regarding short portfolios, could become so burdensome as to deter market participants from participating in, and create barriers to entry to, the FTR markets. That would upset the balance advocated by the Commission's Credit Policy Statement, sacrificing market efficiency in the name of credit security. As the Commission observed in the Policy Statement, "[w]hile requiring all market participants in ISOs/RTOs to be fully collateralized would eliminate the mutualized credit risk . . . such a goal would impose significant costs on market participants and, in turn, would represent a serious barrier to entry into the markets." [23] Establishing credit rules that fully protect the market, but at the expense of the viability and liquidity of FTR markets, also would run counter to the Commission's repeated pronouncements favoring the establishment of long-term FTR markets to enable hedging.[24]

The proposed change to the default assessment rules, by contrast, allows for a balanced and more targeted solution to unexpected congestion, because it applies only after an actual default. It does not inhibit trading in the FTR markets by requiring the posting of extraordinary amounts of security. Instead, it provides additional remedies to

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23 Credit Policy Statement at P 19. See also Midwest Indep. Transmission Sys. Operator, Inc., 115 FERC ¶ 61,296, at P 16.

24 Order No. 681, Long-Term Firm Transmission Rights in Organized Electricity Markets, III FERC Stats. & Regs., Regs. Preambles ¶ 31,226, at P 169 (2006), on reh'g, Order No. 681-A, 117 FERC ¶ 61,201 (2006).

PJM and other market participants to address defaults of those that voluntarily choose to engage in high-risk ventures through the formation of separate affiliates in which to isolate the activity. Addressing through default allocation rules the consequences of particularly risky positions isolated in Affiliates complements the credit policy changes by allowing the credit requirement to focus on the more likely, anticipated cases, rather than forcing credit policy to cover the extremes.[25]

5. *Current Circumstances Demonstrate that the Proposed Change Is Just and Reasonable*

PJM's concern about the default exposure risks of net short FTR portfolios is not hypothetical or mere conjecture. A market participant holding such a portfolio defaulted on its obligations last month, and it is therefore likely to default again this month and in each of the next four months.

Power Edge LLC ("Power Edge") holds a net short portfolio including over 13,000 MW of counterflow FTRs that require it to make payments to PJM when congestion occurs between identified PJM nodes. Power Edge undertook this obligation in the PJM FTR auctions (and by purchasing bilaterally similar positions of another market participant) in return for a specified payment stream it receives from the initial FTR auction purchases. It anticipated that the payment streams it receives from the

25 If the enclosed changes to the default provisions are accepted, PJM would make a conforming change in a subsequent filing to require PJM to net FTR positions across Affiliates, thereby reducing the amount of financial security that the recently proposed and forthcoming rules would impose on holders of net short FTR portfolios. This efficiency will enhance liquidity in the FTR markets, reduce credit requirements as a barrier to entry and help to preserve the ability of traders to organize their FTR activity in multiple affiliates. Clearly, netting of this sort is not possible to reduce credit requirements without an accompanying right to set-off in the event of default.

auction clearing prices would exceed the amounts it would be required to pay on its counterflow FTR positions. In other words, it bet that congestion would be less than the market expected on the relevant FTR paths in the auction.

Power Edge receives one-twelfth of its auction payment stream each month from PJM, less the amounts Power Edge must pay on the counterflow FTRs. However, Power Edge seriously miscalculated. While its strategy did not create untoward exposure initially, as a consequence of much warmer weather than typical this past fall and, more importantly, an extended planned transmission outage that commenced in late November, Power Edge's position deteriorated significantly. As a result of the outage, PJM forecasts that there is now and likely will be for the next several months significant congestion on the FTR paths held by Power Edge. As a result of this congestion, Power Edge owes PJM approximately $1.5 million from the November 2007 billing period. Power Edge was billed for such obligation in December 2007, and defaulted on that payment obligation.

As to prospective defaults, PJM billed Power Edge $19.9 million earlier this month for December 2007 obligations arising from its net short FTR portfolio. Power Edge's payment on that bill is due on January 22, 2008. Based on Power Edge's default on its much smaller December bill, it is almost certain that Power Edge will default on its January bill. Further, PJM estimates that Power Edge will be liable for an additional approximately $60 million on its counterflow positions for the balance of its annual FTR positions, which have a remaining term that continues through May 31, 2008. Again, based on Power Edge's inability to pay its December obligation, there is a high likelihood

that Power Edge will default on all subsequent obligations under its annual FTR counterflow positions.

Notably, Power Edge is a member of a family of affiliated companies doing business in PJM, but virtually all of the affiliates' risky undiversified counterflow FTR positions have been isolated in one company: Power Edge. Power Edge has six Affiliates (previously identified as such by Power Edge and its Affiliates in the Affiliate Disclosure Forms they submitted to PJM) that are Members of PJM and trade in the PJM markets.[26] Four of these Affiliates trade in FTRs, but only Power Edge holds a significant net short FTR portfolio. While Power Edge will owe PJM nearly $20 million for its obligations incurred in December, PJM will, absent the enclosed Operating Agreement change, be required to pay Power Edge's Affiliates approximately $8 million on their prevailing flow FTRs for December 2007. PJM estimates that these Affiliates would receive further payments of between $11 million and $26 million for their FTR positions from January through May, 2008, i.e., the same period as their Affiliate's expected defaults. Thus, while Power Edge is expected to default on $80 million of its FTR positions, shifting such costs to the PJM members, absent this Operating Agreement change PJM will pay tens of millions of dollars to its other affiliated FTR trading companies.[27]

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26 These affiliates are BJ Energy LLC, Accord Energy LLC, Franklin Power LLC, GLE Trading LLC, Ocean Power LLC, and Pillar Fund LLC.

27 The four Power Edge Affiliates that trade in the FTR markets also have posted over $13 million in FTR-related security but, absent the enclosed rule change, PJM could not use any of that security to mitigate the other Member's exposure to the costs of Power Edge's defaults.

Through the proposed rule change, Power Edge affiliates, rather than the other PJM Members, would be responsible for much of the liability arising from Power Edge's default. PJM would make default assessments on the other Members to cover any remaining default amounts, which will still be significant, but appropriately, the prospective exposure of the other Members will be reduced.[28]

Upon information and belief, PJM understands that Power Edge and each of its identified Affiliates are under the control of a single entity, Tower Research Capital Investment ("TRCI") (or its successor, Tower Research Capital), which acts as the managing member of each company.[29] Moreover, the same individual is designated for all seven Affiliates as the representative authorized to conduct market activity in PJM on their behalf.

As admitted by Power Edge's Affiliate, BJ Energy LLC, in a filing to the Commission, "trading strategies" developed by employees of the managing member "are generally organized into separate companies" controlled by the managing member.[30]

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28 PJM, of course, does not waive any rights it otherwise may have to recover from Power Edge and its affiliates amounts that remain unpaid. PJM also does not waive its rights to pursue other complaints against Power Edge and its affiliates under the Federal Power Act concerning their activities in the PJM markets.

29 See "Petition for Acceptance of Initial Rate Schedule, Waivers and Blanket Authority," BJ Energy LLC, Docket No. ER05-1097-000 (June 9, 2005) ("Petition"), pertaining to one of Power Edge's declared affiliates.

30 Id., Petition at 2:

> TRCI is a money management firm that is primarily engaged in the development of trading and investment strategies. To this end, TRCI designs proprietary trading algorithms by using rigorous statistical methodology to identify non-random patterns in the behavior of markets. The owners of TRCI are individuals. Trading

(...continued)

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Apparently following this strategy, virtually all of Tower Capital's risky unhedged bets on future congestion, through net short FTR positions, were placed in Power Edge. While this approach may insulate passive investors in the affiliated companies (to the extent there are any), it exposes the other PJM members to greater risk, by housing risky trading strategies in a separate company that is more subject to default than it would be if the Affiliates' FTR portfolios were combined.

PJM emphasizes that while Power Edge's default has brought this issue to a head, this filing is not only about Power Edge. As noted above, there currently are dozens of other Members that hold net short portfolios of FTR positions and many have Affiliates that also trade FTRs. If any of these Members defaulted, or if any other new or existing Member chooses to follow the road-map provided by Power Edge and then defaults, PJM Members will bear the consequences of the default. Accordingly, PJM asks the Commission to accept the enclosed change to the Operating Agreement.

II. Effective Date

PJM asks that the enclosed Operating Agreement revisions be made effective one day after the submission of this filing, i.e., on January 19, 2008, and, therefore, this filing seeks only prospective changes to PJM's default allocation rules.[31]

(continued...)

strategies created by the employees of TRCI are generally organized into separate companies for which TRCI is the managing member.

[31] The PJM members Committee meets on January 24, 2008 and will be asked at that time to ratify this Operating Agreement change, including the requested effective date. Operating Agreement, section 18.6(a) (requiring Member approval of Operating Agreement amendments). This filing is submitted subject to that ratification by the PJM Members, as the Commission has previously permitted.

(...continued)

The Commission has good cause to waive the notice requirement of its regulations, 18 C.F.R. § 35.3(a), to permit the proposed effective date on less than 60 days notice. Absent an immediate effective date, PJM Members will be faced with nearly $20 million in default assessments when on January 22 (as expected) Power Edge defaults on its latest bill. Absent effectiveness of the proposed Operating Agreement revisions before the default, PJM will have to assess nearly $20 million against the other Members. In contrast, approval of the revised default assessment provisions before Power Edge's default triggers those assessments will ensure that the $20 million default will be assessed first against the other affiliated FTR trading companies of Power Edge (to the extent they are owed FTR revenues or have posted FTR-related security). Allowing the rule change to become effective immediately will prevent placing the risks of Power Edge's speculative portfolio on other PJM members, while its Affiliates retain the benefits of the family's other FTR positions.[32]

The Commission also has found good cause to waive the 60-day prior notice

(continued…)

See, e.g., PJM Interconnection, L.L.C., 104 FERC ¶ 61,082, at P 7 & n.7 (2003); PJM Interconnection, L.L.C., 92 FERC ¶ 61,059, at 61,150 n.5 (2000).

32 Based on the proposed effective date, if Power Edge as expected defaults on January 22, or in any month thereafter, PJM will set-off the amounts of the defaults against any revenues otherwise owed to the Affiliates, and will utilize the described security the Affiliates have provided, before imposing default allocation assessments on any other Members, unless the Commission directs PJM to disburse the amounts owing to the Affiliates.

requirement where the parties to an agreement have agreed to the effective date.[33] Here, the PJM Members will have agreed to a change in the default allocation rules (and the proposed effective date for the change) when they ratify this rule change on January 24, pursuant to the contractual procedures for revising the Operating Agreement to which Power Edge and all of its affiliates trading in PJM are signatories.

For all of these reasons, the Commission should make these changes effective one day after the date of this filing, and grant any waivers necessary to allow this effective date. Cf. 18 C.F.R. § 35.3(a).

III. Documents Enclosed

PJM encloses the original and five copies of each of the following:

1. this transmittal letter; and

2. revised PJM Operating Agreement sheets (including redlined versions showing the changes).

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33 City of Holyoke v. FERC, 954 F.2d 740, 744 (D.C. Cir. 1992). See also Gulf States Utils. Co. v. FERC, 1 F.3d 288, 292-93 (5th Cir. 1993); City of Piqua v. FERC, 610 F.2d 950, 954-55 (D.C. Cir. 1979); Midwest Indep. Transmission Sys. Operator, Inc., 115 FERC ¶ 61,293, at 62,046-48 (2006).

IV. Correspondence and Communications

Correspondence and communications with respect to this filing should be sent to, and PJM requests the Secretary include on the official service list, the following:

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V. Service and Request for Waiver

PJM requests waiver of the posting requirements to permit electronic service rather than paper service. Waiver of paper service is consistent with the Commission's decision to establish electronic service as the default method of service on service lists maintained by the Commission Secretary for Commission proceedings.[34] While Order No. 653 did not amend the posting requirements, application of its rules to initial tariff filings would be consistent with the Commission's "efforts to reduce the use of paper in

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[34] See Electronic Notification of Commission Issuances, Order No. 653, 2001-2005 FERC Stats. & Regs., Regs. Preambles ¶ 31,186, order on reh'g, Order No. 653-A, 2001-2005 FERC Stats. & Regs., Regs. Preambles ¶ 31,178 (2005).

compliance with the Government Paperwork Elimination Act."[35] Applying amended section 385.2010(f) to this filing, PJM will post this filing today to the FERC filings section of its internet site, http://www.pjm.com/documents/ferc.html, and send an e-mail to all PJM members and all state utility regulatory commissions in the PJM region[36] alerting them that this filing has been made by PJM today and is available by following

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35 Id. at P 2 (citing 44 U.S.C. § 3504).

36 PJM already maintains, updates, and regularly uses e-mail lists for all PJM members and affected commissions.

such link. Within one business day, PJM will send a second e-mail to the same list, containing a link that takes the recipient directly to the filed document.[37]

Respectfully submitted,

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January 18, 2008

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37 PJM anticipates that in unusual circumstances, it may not be possible to post the document to its website on the day of filing, or to distribute an active link to the document within one business day. Consistent with 18 C.F.R. § 385.2010(i)(3), if a link to the document does not become available within two business days after filing, PJM will arrange for immediate service by other means.

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PJM OPERATING AGREEMENT

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notified Member may remedy such asserted breach by: (i) paying all amounts assertedly due, along with interest on such amounts calculated in accordance with the methodology specified for interest on refunds in FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii); and (ii) demonstration to the satisfaction of the Office of the Interconnection that the Member has taken appropriate measures to meet any other obligation of which it was deemed to be in breach; provided, however, that any such payment or demonstration may be subject to a reservation of rights, if any, to subject such matter to the PJM Dispute Resolution Procedures; and provided, further, that any such determination by the Office of the Interconnection may be subject to review by the PJM Board upon request of the Member involved or the Office of the Interconnection. If a Member has not remedied a breach by the 3rd business day following receipt of the Office of the Interconnection's notice, or receipt of the PJM Board's decision on review, if applicable, then the Member shall be in default and, in addition to such other remedies as may be available to the LLC:

i) A defaulting Market Participant shall be precluded from buying or selling in the PJM Interchange Energy Market, the PJM Capacity Credit Market, or any other market operated by PJM until the default is remedied as set forth above;

ii) A defaulting Member shall not be entitled to participate in the activities of any committee or other body established by the Members Committee or the Office of the Interconnection; and

iii) A defaulting Member shall not be entitled to vote on the Members Committee or any other committee or other body established pursuant to this Agreement.

15.2 Enforcement of Obligations.

If the Office of the Interconnection sends a notice to the PJM Board that a Member has failed to perform an obligation under this Agreement, the PJM Board shall initiate such action against such Member to enforce such obligation as the PJM Board shall deem appropriate. Subject to the procedures specified in Section 15.1, a Member's failure to perform such obligation shall be deemed to be a default under this Agreement.

15.2.1 Limited Additional Right To Set-Off And Apply Collateral.

Where a default under this agreement arises from the failure of a Member to make full and timely payment of an obligation arising from such Member's activity in PJM's FTR markets, PJM (a) may set-off such amounts due and owing to PJM against any amounts otherwise owed to such defaulting Member's Affiliate and/or (b) apply any Financial Security posted by such defaulting Member's Affiliate to meet the Member's payment obligation; provided however, that the right to make such set-offs and/or apply such collateral shall (i) apply only where the defaulting Member holds a net short portfolio of FTR positions in a billing period, and (ii) be limited only to the amounts otherwise due and owing to, or the Financial Security posted by, the Affiliate arising from its activity in PJM's FTR markets (excluding FTRs converted from Auction Revenue Rights pursuant to section 7.1.1(b) of Schedule 1 of this Agreement). Where more than one Affiliate is subject to the provisions of this section, PJM may set-off amounts owed to PJM by the defaulting Member against amounts due and owing to such Affiliates, or apply Financial Security posted by any or all such Affiliates, in full or in part as necessary to remedy the default in whole or in part. For purposes of this section, a "net short portfolio of FTR positions" results when a Member (1) acquires FTR positions in an annual FTR

auction that have a net negative value in such auction; or (2) acquires in any monthly, quarterly, or, balance-of-period auction FTR positions that have a net negative value in such auction, which when considered with the rest of the Member's FTR portfolio results in a net negative value for the entire portfolio; or (3) acquires through a bilateral transaction reported to PJM, FTR positions that have a net negative value at the time acquired, which when considered with the rest of the Member's FTR portfolio results in a net negative value for the entire portfolio. For purposes of (2) and (3) above, the value of the rest of the Member's FTR portfolio shall be based upon the results of the most recently held FTR auction.

15.2.2 Default Allocation.

In order to remedy a default, but without limiting any rights the LLC may have against the defaulting Member, the PJM Board may assess against, and collect from the Members not in default, in proportion to their Default Allocation Assessment, an amount equal to the amount that the defaulting Member has failed to pay to the Office of the Interconnection (reduced by any amounts used as set-off against PJM payment obligations or that were covered by Financial Security under section 15.2.1), along with appropriate interest. Such assessment shall in no way relieve the defaulting Member of its obligations. A Member that has paid such an assessment to the LLC shall have an independent right to seek and obtain payment and recovery from the defaulting Member of the amount of the assessment the Member paid to the LLC. In addition to any amounts in default, the defaulting Member shall be liable to the LLC for all reasonable costs incurred in enforcing the defaulting Member's obligations.

15.2.3 Collection by the Office of the Interconnection.

By vote at any Members Committee meeting, a majority of the Members that have paid a Default Allocation Assessment may request and appoint the Office of the Interconnection to act as agent on behalf of the Members that have paid a Default Allocation Assessment, solely for the purpose of pursuing and collecting any amounts so assessed; provided, however, that any Member that does not desire for the Office of the Interconnection to act on their behalf with regard to such collection shall so inform the Office of the Interconnection. In the event that the Office of the Interconnection is appointed as agent for the Members, the Office of the Interconnection shall be authorized to pursue collection through such actions, legal or otherwise, as it reasonably deems appropriate, including but not limited to the prosecution of legal actions and assertion of claims on behalf of the affected Members in the state and federal courts as well as under the United States Bankruptcy Code; provided, however, that the Office of the Interconnection shall take no action on behalf of those Members that have requested that the Office of the Interconnection not act on their behalf. After deducting the costs of collection, any amounts recovered by the Office of the Interconnection on behalf of the affected Members shall be distributed to the Members who have paid their Default Allocation Assessment in proportion to the Default Allocation Assessment paid by each Member except those Members who informed the Office of the Interconnection that it should not act as their agent.

15.2.4 Default Allocation Assessment.

(a) "Default Allocation Assessment" shall be equal to (0.1(1/N) + 0.9(A/Z)), where:

N = the total number of Members, calculated as of five o'clock p.m. eastern prevailing time on the date PJM declares a Member in default, excluding *ex officio* Members, State Consumer Advocates, Emergency and Economic Load Response Program Special Members, and municipal electric system Members that have been granted a waiver under section 17.2 of this Agreement.

A = for Members comprising factor "N" above, the Member's gross activity as determined by summing the absolute values of the charges and credits for each of the Activity Line Items identified in section 15.2.2(b) of this Agreement as accounted for and billed pursuant to section 3 of Schedule 1 of this Agreement for the month of default and the two previous months.

Z = the sum of factor A for all Members excluding *ex officio* Members, State Consumer Advocates, Emergency and Economic Load Response Program Special Members, and municipal electric system Members that have been granted a waiver under section 17.2 of this Agreement.

PJM OPERATING AGREEMENT

(Redline Version)

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notified Member may remedy such asserted breach by: (i) paying all amounts assertedly due, along with interest on such amounts calculated in accordance with the methodology specified for interest on refunds in FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii); and (ii) demonstration to the satisfaction of the Office of the Interconnection that the Member has taken appropriate measures to meet any other obligation of which it was deemed to be in breach; provided, however, that any such payment or demonstration may be subject to a reservation of rights, if any, to subject such matter to the PJM Dispute Resolution Procedures; and provided, further, that any such determination by the Office of the Interconnection may be subject to review by the PJM Board upon request of the Member involved or the Office of the Interconnection. If a Member has not remedied a breach by the 3rd business day following receipt of the Office of the Interconnection's notice, or receipt of the PJM Board's decision on review, if applicable, then the Member shall be in default and, in addition to such other remedies as may be available to the LLC:

i) A defaulting Market Participant shall be precluded from buying or selling in the PJM Interchange Energy Market, the PJM Capacity Credit Market, or any other market operated by PJM until the default is remedied as set forth above;

ii) A defaulting Member shall not be entitled to participate in the activities of any committee or other body established by the Members Committee or the Office of the Interconnection; and

iii) A defaulting Member shall not be entitled to vote on the Members Committee or any other committee or other body established pursuant to this Agreement.

15.2 Enforcement of Obligations.

If the Office of the Interconnection sends a notice to the PJM Board that a Member has failed to perform an obligation under this Agreement, the PJM Board shall initiate such action against such Member to enforce such obligation as the PJM Board shall deem appropriate. Subject to the procedures specified in Section 15.1, a Member's failure to perform such obligation shall be deemed to be a default under this Agreement.

15.2.1 Limited Additional Right To Set-Off And Apply Collateral.

Where a default under this agreement arises from the failure of a Member to make full and timely payment of an obligation arising from such Member's activity in PJM's FTR markets, PJM (a) may set-off such amounts due and owing to PJM against any amounts otherwise owed to such defaulting Member's Affiliate and/or (b) apply any Financial Security posted by such defaulting Member's Affiliate to meet the Member's payment obligation; provided however, that the right to make such set-offs and/or apply such collateral shall (i) apply only where the defaulting Member holds a net short portfolio of FTR positions in a billing period, and (ii) be limited only to the amounts otherwise due and owing to, or the Financial Security posted by, the Affiliate arising from its activity in PJM's FTR markets (excluding FTRs converted from Auction Revenue Rights pursuant to section 7.1.1(b) of Schedule 1 of this Agreement). Where more than one Affiliate is subject to the provisions of this section, PJM may set-off amounts owed to PJM by the defaulting Member against amounts due and owing to such Affiliates, or apply Financial Security posted by any or all such Affiliates, in full or in part as necessary to remedy the default in whole or in part. For purposes of this section, a "net short portfolio of FTR positions" results when a Member (1) acquires FTR positions in an annual FTR

auction that have a net negative value in such auction; or (2) acquires in any monthly, quarterly, or, balance-of-period auction FTR positions that have a net negative value in such auction, which when considered with the rest of the Member's FTR portfolio results in a net negative value for the entire portfolio; or (3) acquires through a bilateral transaction reported to PJM, FTR positions that have a net negative value at the time acquired, which when considered with the rest of the Member's FTR portfolio results in a net negative value for the entire portfolio. For purposes of (2) and (3) above, the value of the rest of the Member's FTR portfolio shall be based upon the results of the most recently held FTR auction.

15.2.2 Default Allocation.

In order to remedy a default, but without limiting any rights the LLC may have against the defaulting Member, the PJM Board may assess against, and collect from the Members not in default, in proportion to their Default Allocation Assessment, an amount equal to the amount that the defaulting Member has failed to pay to the Office of the Interconnection (reduced by any amounts used as set-off against PJM payment obligations or that were covered by Financial Security under section 15.2.1), along with appropriate interest. Such assessment shall in no way relieve the defaulting Member of its obligations. A Member that has paid such an assessment to the LLC shall have an independent right to seek and obtain payment and recovery from the defaulting Member of the amount of the assessment the Member paid to the LLC. In addition to any amounts in default, the defaulting Member shall be liable to the LLC for all reasonable costs incurred in enforcing the defaulting Member's obligations.

15.2.3~~1~~ Collection by the Office of the Interconnection.

By vote at any Members Committee meeting, a majority of the Members that have paid a Default Allocation Assessment may request and appoint the Office of the Interconnection to act as agent on behalf of the Members that have paid a Default Allocation Assessment, solely for the purpose of pursuing and collecting any amounts so assessed; provided, however, that any Member that does not desire for the Office of the Interconnection to act on their behalf with regard to such collection shall so inform the Office of the Interconnection. In the event that the Office of the Interconnection is appointed as agent for the Members, the Office of the Interconnection shall be authorized to pursue collection through such actions, legal or otherwise, as it reasonably deems appropriate, including but not limited to the prosecution of legal actions and assertion of claims on behalf of the affected Members in the state and federal courts as well as under the United States Bankruptcy Code; provided, however, that the Office of the Interconnection shall take no action on behalf of those Members that have requested that the Office of the Interconnection not act on their behalf. After deducting the costs of collection, any amounts recovered by the Office of the Interconnection on behalf of the affected Members shall be distributed to the Members who have paid their Default Allocation Assessment in proportion to the Default Allocation Assessment paid by each Member except those Members who informed the Office of the Interconnection that it should not act as their agent.

15.2.4~~2~~ Default Allocation Assessment.

(a) "Default Allocation Assessment" shall be equal to (0.1(1/N) + 0.9(A/Z)), where:

N = the total number of Members, calculated as of five o'clock p.m. eastern prevailing time on the date PJM declares a Member in default, excluding *ex officio* Members, State Consumer Advocates, Emergency and Economic Load Response Program Special Members, and municipal electric system Members that have been granted a waiver under section 17.2 of this Agreement.

A = for Members comprising factor "N" above, the Member's gross activity as determined by summing the absolute values of the charges and credits for each of the Activity Line Items identified in section 15.2.2(b) of this Agreement as accounted for and billed pursuant to section 3 of Schedule 1 of this Agreement for the month of default and the two previous months.

Z = the sum of factor A for all Members excluding *ex officio* Members, State Consumer Advocates, Emergency and Economic Load Response Program Special Members, and municipal electric system Members that have been granted a waiver under section 17.2 of this Agreement.

EXHIBIT D

122 FERC ¶ 61,279
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Suedeen G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

PJM Interconnection, L.L.C. Docket Nos. ER08-376-000
ER08-455-000
ER08-520-000
(Not consolidated)

ORDER ON TARIFF REVISIONS

(Issued March 25, 2008)

1. On December 26, 2007 (Docket No. ER08-376-000), January 18, 2008 (Docket No. ER08-455-000), and January 31, 2008 (Docket No. ER08-520-000), PJM Interconnection, L.L.C. (PJM) filed revisions to its credit policies with respect to its Financial Transmission Rights (FTR) markets.[1] The filings in Docket Nos. ER08-376-000 and ER08-520-000 primarily adjust PJM's collateral requirements for participants in the FTR markets in order to better account for the volatility and risk of certain positions. PJM requests an effective date of April 1, 2008 for the filings in Docket Nos. ER08-376-000 and ER08-520-000, with implementation applicable to FTRs that commence in the next Planning Period.[2]

2. The filing in Docket No. ER08-455-000 would allow PJM to set off a company's FTR default against FTR market revenues that PJM would otherwise have paid to the defaulting company's affiliates and to apply such affiliates' posted security to the default to the extent that the security relates to the company's FTR positions. In its application, PJM describes a set of circumstances involving the default of one company, Power Edge LLC (Power Edge), in its FTR markets and suggests that the Docket No. ER08-455-000 filing would apply to that default. PJM requests an effective date of January 19, 2008, one day after the submission of its filing in Docket No. ER08-455-000.

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[1] *See* attached Appendix A for a listing of the filed tariff sheets.

[2] PJM's FTR Planning Period runs from June 1st to May 31st.

3. RTOs such as PJM are required by statute[3] to make available long-term firm transmission rights, or equivalent tradable or financial transmission rights, that will allow load serving entities (LSEs) to deliver their output or purchased energy using the transmission grid to meet the LSEs' service obligations. Consistent with its pre-existing practice, PJM chose to continue using financial transmission rights, both Auction Revenue Rights (ARRs) and an FTR auction, to meet this statutory requirement. FTRs permit load to schedule delivery of energy from the source generator to the load without being responsible for paying congestion costs over the transmission line. FTRs therefore operate as a hedge against expected transmission congestion costs, and thereby provide load with the equivalent of firm transmission service. PJM chose to establish an ARR and FTR auction market that it believes enables load to both obtain and trade FTRs efficiently.

4. In this order, we accept PJM's revised collateral requirements as proposed in Docket Nos. ER08-376-000 and ER08-520-000, to become effective April 1, 2008, subject to conditions, because these collateral requirements will assist PJM in managing the risk and volatility of certain positions taken by FTR holders in the FTR auction markets PJM has established and help protect customers. With respect to the filing in Docket No. ER08-455-000, we note that the Commission's Office of Enforcement began a non-public investigation in January into the activities of Power Edge and its affiliates in PJM's FTR markets. That investigation is the appropriate context in which to examine whether the Commission's rules have been violated, and if so, whether a remedy is warranted. PJM's proposal to generically treat affiliated corporate structures differently than single companies participating in the FTR market will not address the perceived flaw in its credit policies, which may be present whether a company is or is not affiliated with other participants in the market. Accordingly, we reject PJM's proposal in Docket No. ER08-455-000.

I. Background

5. PJM's Credit Policy, Attachment Q of its Open Access Transmission Tariff (OATT) (Credit Policy), allows for two types of FTR positions: concurrent flow FTRs and counterflow FTRs.[4] FTRs in PJM are valued based on the expected differences between the locational marginal prices (LMP) at the FTR's designated source and sink points over the life of the FTR. FTRs are financial commitments that are settled based

[3] *Long-Term Firm Transmission Rights in Organized Electricity Markets*, Order No. 681, FERC Stats. & Regs. ¶ 31,226, *order on reh'g*, Order No. 681-A, 117 FERC ¶ 61,201 (2006).

[4] PJM also refers to concurrent flow FTRs as "normal" flow and "prevailing" flow FTRs.

on prices in the Day-ahead market. A concurrent flow FTR occurs when the source price is lower than its sink price, an indication that the FTR consumes valuable transmission flow capability relative to projected transmission constraints. Concurrent flow FTRs have a positive purchase price that the purchaser commits to pay in the FTR auction[5] and it is expected to yield a positive revenue stream to the FTR holder based on its economic value in PJM's Day-ahead energy market. Concurrent flow FTR positions are profitable when actual congestion charges in the Day-ahead energy market are higher than the expected congestion charges.

6. Counterflow FTRs occur when the source price is higher than the sink price, indicating that the FTR releases valuable transmission flow capability by providing flow in the opposite direction relative to a transmission constraint. Counterflow FTRs have a "negative" purchase price so the auction participant will be paid some amount to take on the costs and risks of holding a counterflow FTR.[6] Counterflow FTRs are expected to result in negative revenue streams (i.e., payment obligations) to the FTR holder based on their economic value in the Day-ahead energy market. Counterflow FTR positions are profitable when actual congestion charges in the Day-ahead market are lower than the expected congestion charges.

7. Companies that purchase and sell FTRs solely to arbitrage the price differences between the FTR auction and the Day-ahead energy market tend to be financial participants (i.e., speculators). Most financial participants maintain a balanced portfolio of concurrent flow and counterflow FTRs to manage their risk. According to PJM, a net "short" FTR position, i.e., a net counterflow portfolio, is more risky than a balanced portfolio because it is exposed to the volatility of changing congestion without an offset from concurrent flow FTRs. While parties that choose to hold such positions serve a useful purpose by providing additional liquidity to the auction, they undertake above-average market risk.

II. <u>Notice of Filings and Responsive Pleadings</u>

8. Notice of PJM's filing in Docket No. ER08-376-000 was published in the *Federal Register*, 73 Fed. Reg. 2,336 (2008), with interventions, comments and protests due on or before January 16, 2008. On February 8, 2008, PJM filed an answer and on February 15, 2008, Citadel Energy Products LLC, Citadel Energy Strategies, LLC, and

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[5] A concurrent flow FTR holder pays for "annual" FTRs in approximately equal monthly payments over the 12-month Planning Period. The default risk for which PJM currently requires collateral is the result of the deferred payments.

[6] Counterflow FTR holders receive monthly payments for over the 12-month Planning Period.

Citadel Energy Investments Ltd, (collectively Citadel) filed a reply. Notice of PJM's filing in Docket No. ER08-455-000 was published in the *Federal Register*, 73 Fed. Reg. 6,173 (2008), with interventions, comment, and protests due on or before February 1, 2008, which was extended to February 15, 2008. DTE Energy Trading, Inc. (DTE Energy) and PJM filed answers. Notice of PJM's filing in Docket No. ER08-520-000 was published in the *Federal Register*, 73 Fed. Reg. 10,021 (2008), with interventions, comments and protests due on or before February 21, 2008. On March 21, 2008, PJM filed an answer. Parties filing comments or protests regarding these PJM filings are listed in Appendix B of this order.

III. Discussion

A. Procedural Matters

9. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2007), all timely filed motions to intervene and any motions to intervene out-of-time filed before the issuance date of this order are granted. Granting late intervention at this stage of the proceeding will not disrupt this proceeding or place additional burden on the existing parties.[7]

10. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2007), prohibits an answer to an answer or protest unless otherwise ordered by the decisional authority. We will accept the answers filed by PJM, Citadel, and DTE Energy as they have assisted us in the decision-making process.

B. Docket No. ER08-376-000

1. FTR Collateral Requirement Revisions

a. PJM's Proposal

11. In its filing in Docket No. ER08-376-000, PJM asserts that the proposed revisions to its Credit Policy "right sizes" its FTR collateral requirements for both concurrent and counterflow FTR positions.

12. PJM explains that it currently calculates its FTR credit requirements using FTR cost and historical congestion values (referred to as Expected LMP Values) on each transmission path for a whole Planning Period. The credit requirement for each FTR is

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[7] Pursuant to Rule 214(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(a)(2) (2007), the Pennsylvania Office of Consumer Advocate was not required to file a motion to intervene, but only a timely notice of intervention.

the difference between the bid price and the Expected LMP Value. The current rules reduce the Expected LMP value by 30 percent for all concurrent flow FTRs, but do not adjust the Expected LMP value for counterflow FTRs.

13. PJM explains that a disproportionately large portion of the congestion value of FTRs is received by holders in the summer months at the beginning of each Planning Period. However, since credit requirements were based solely on total annual value and total annual cost, the timing difference between front-loaded congestion values and the evenly spread cost of the FTRs created a credit exposure because the FTR holder could receive a large amount of congestion revenues in the summer, but only pay a relatively small portion of the overall FTR cost during the summer months. With counterflow FTRs, a participant assumes the opposite exposure of the concurrent FTR position. A concurrent FTR offsets a volatile exposure to congestion against a fixed obligation to pay the purchase price of the concurrent flow FTR. Conversely a counterflow FTR holder accepts a stream of uncertain future monthly congestion obligations in exchange for receipt of fixed monthly payments for its counterflow FTRs. PJM's current credit rules require only that a counterflow FTR holder post the difference between the total annual cost of its counterflow FTRs and the total annual Expected LMP Value. PJM states that this requirement is inadequate because it does not recognize the potentially large up-front payments that are possible for the participant. Participants can acquire a large portfolio of counterflow FTRs, but post very little collateral because the FTR cost may be able to cover the Expected LMP value for the year, even if it cannot do so on a month-to-month basis during the year. A position that, on an annual basis, has been profitable during the past does not require much collateral, but a large portfolio of such positions poses significant risks. PJM states that its current Credit Policy may actually attract parties with a high risk tolerance to pursue a counterflow bidding strategy.

14. PJM proposes to remedy this problem by calculating the FTR Credit Requirement on a monthly rather than an annual basis. PJM argues that a monthly calculation provides better matching of collateral requirements with actual FTR risks while also removing the inequity that results from imposing a global average 30 percent discount on all concurrent flow Expected LMP Values, since the proposal's use of monthly congestion history automatically adjusts for individual FTR monthly congestion shapes and month-to-month volatility. PJM proposes to calculate the overall FTR Credit Requirement by summing the credit requirement subtotals for only those months when the subtotals are positive. PJM explains that the positive subtotal months are those in which the gross payments to PJM are expected to exceed the gross receipts from PJM, and capture both the counterflow exposure and concurrent flow exposure that arise from timing differences between congestion values and FTR auction payments throughout the year.

15. PJM also proposes a 10 percent adjustment to the Expected LMP Values to provide a buffer against uncertainty in congestion values without regard to intra-year

timing. PJM contends that this adjustment will mitigate exposure due to the risks inherent in relying on the accuracy of historical congestion values when formulating expectations about the future. PJM states that the 10 percent adjustment is either a reduction or an adder to Expected LMP Values depending upon whether the FTR reflects a concurrent flow or counterflow position.

16. PJM explains that the credit requirements under its proposal actually commence at a somewhat higher level than the current system, but can begin to drop immediately as PJM applies the actual monthly history to each FTR in a participant's portfolio. PJM also explains that the net result of its proposal is an approximately 25 percent reduction in collateral requirements when averaged over the twelve-month Planning Period relative to application of the current method.

17. PJM contends that its proposal also corrects a problem with application of ARR credits.[8] PJM explains that it currently counts ARR credits on a Planning Year basis and allows offset to any FTR credit requirement for any month, which results in the possibility that ARR credits spread over many months may be used in the system to offset credit requirements of a single month of FTRs. PJM's proposal eliminates the problem by counting ARR credits on a monthly basis and allows offset to FTR credit requirements only for corresponding months.

18. To incorporate the proposed reforms, PJM establishes and revises some defined terms: (1) "FTR Historical Value" replaces the less self-explanatory terms Revenue Offset and Expected LMP Value; (2) "FTR Credit Requirement" is the amount of credit that a participant must provide in order to support the FTR positions that it holds and/or is bidding for; (3) "FTR Credit Limit" means only that credit specifically used for FTR activity; and (4) "FTR Monthly Credit Requirement Contribution" is the total FTR cost less the FTR Historical Value for each FTR for each month. PJM establishes the monthly credit exposure for each FTR and facilitates the monthly updating that permits an accelerated reduction of required credit and return of collateral. PJM explains that the term FTR Monthly Credit Requirement Contribution indicates that each FTR contributes on a monthly basis to the credit calculation for that month, which may be positive or negative.

19. Among PJM's other changes, section V.A obligates participants to maintain their FTR Credit Limit at a level equal to or greater than the FTR Credit Requirements. Section V.B sets forth the basic monthly calculation of FTR Credit Requirement as the future summation of expected monthly net FTR obligations of the participant to PJM, less the prorated value of any ARRs held. Section V.C clarifies that PJM will reject

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[8] ARRs entitle the ARR holder to receive the auction revenues that result from the sale of related FTRs.

bids that would cause the FTR Credit Requirement to exceed the FTR Credit Limit. Section V.E removes the reference to credit release schedule since it no longer applies, clarifies certain language, and clarifies the requirement that credit extend sufficiently past the last payment date for an FTR product for PJM to allow a cure period and to initiate recovery prior to expiration. Finally, PJM has made other minor housekeeping corrections.

20. In addition, PJM proposes to revise Sheet No. 523G of Attachment Q of its OATT relating to PJM's right to require additional Financial Security to state that "payment of additional Financial Security is due immediately upon notification of such modification and subject to the provisions of section VII below." Also, PJM proposes a revision to Sheet No. 523 K of Attachment Q that would provide PJM with the ability to retain "a defaulting Member's Financial Security for as long as such party's positions exist and for any residual period that PJM may deem appropriate and consistent with the PJM Credit Policy in this Attachment Q, in order to protect PJM's membership from default." However, PJM does not discuss or provide any justification for these two proposed changes in its transmittal letter.[9]

21. PJM asserts that additional protections will be necessary beyond its current proposal that will be specific to the risks posed by undiversified portfolios of counterflow positions. However, PJM states that the current proposed revisions significantly improve its ability to address the risks associated with counterflow positions and argues that there is no reason to delay moving forward with the instant filing. PJM states that it has initiated a stakeholder process to consider the additional reforms and will file those separately.

b. <u>Comments and Protests</u>

22. Regarding PJM's proposal as a whole, the commenters and protesters support the collateral requirement revisions and encourage the Commission to accept the proposal. Both Morgan Stanley Capital Group Inc. (MSCG) and Citadel strongly support PJM's instant filing and urge the Commission to accept the tariff changes proposed in the PJM filing. Citadel explains that PJM's proposed changes strike a reasonable balance between encouraging new entrants to the PJM markets and protecting PJM members against undue exposure from market participants holding undiversified counterflow FTR portfolios and lacking sufficient credit. DC Energy, LLC, and DC Energy Mid-Atlantic (collectively DC Energy) agrees that PJM's proposed change to the Credit Policy provides increased protection against net counterflow positions and thus supports

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[9] The Commission notes that these same proposed revisions were filed in Docket No. ER07-1036 and rejected. *PJM Interconnection, LLC*, 121 FERC ¶ 61,089 (2007) (October 26 Order).

the change. DC Energy believes that PJM's proposal provides a superior methodology of matching collateral requirements with actual FTR risks while also removing the inequity that results from imposing a global average 30 percent discount on all normal flow FTR congestion values, since the proposal's use of monthly congestion history automatically adjusts for individual FTR monthly congestion shapes as well as month-to-month volatility. DC Energy also believes that there is an additional benefit to allowing PJM to return posted collateral on the basis of path specific calculations much more promptly to participants whose positions become increasingly stabilized over the course of the Planning Period. Therefore, DC Energy requests that FERC approve the tariff changes and accept PJM's implementation timeframe.

23. Duke Energy Corporation (Duke) also believes that PJM's proposed revision to the Credit Policy will minimize the default exposure that is created when market participants enter into speculative, high risk FTR positions. Duke states that due to the inadequacy of PJM's credit requirements, a large amount of uplift charges have recently been assessed to PJM market participants as a result of several participants defaulting on their FTR obligations. Thus, Duke argues that PJM's proposal is a step in the right direction in terms of mitigating the risks of default associated with out-of-the-money counterflow FTR positions. Duke believes the end result of these proposed credit requirements is that PJM will be better collateralized, which will better protect the market in the event that there is a default.

24. The Joint Intervenors state that the PJM proposal is a significant improvement over the existing PJM Credit Policy. The Joint Intervenors explain that PJM's current FTR credit policies create an environment that allows market participants to speculate in the FTR markets using, in effect, the risk capital of non-defaulting PJM members to cover losses. The Joint Intervenors argue that PJM's proposed revisions constitute a significant and necessary improvement over its existing FTR credit policies with the benefit that it will eliminate the strong incentive contained in the current FTR credit policy for market participants to structure directional counterflow portfolios to avoid high collateral requirements. According to the Joint Intervenors, holders of concurrent flow FTRs will likely have less stringent collateral requirements because of the elimination of the 30 percent discount applied in the current method and the incentive to structure counterflow portfolios on a purely collateral requirement basis will be eliminated based on the requirements being calculated on a monthly basis. In addition, Joint Intervenors state that there is an additional benefit to allowing cleared FTRs with negative credit requirements to offset positive requirements, allowing market participants to more efficiently deploy collateral.

25. The EPIC Merchant Energy, LP (EPIC) and SESCO Enterprises, LLC (collectively Financial Marketers) also strongly support the modifications to the PJM FTR credit requirements proposed in the instant filing. Financial Marketers state that the proposal should be accepted because it more accurately reflects the variability and

seasonality in the value of the FTR purchases, without unduly penalizing those market participants with diversified and stable FTR portfolios. According to the Financial Marketers, PJM's proposal is consistent with the Commission's October 26 Order on PJM's Credit Policy because it takes into account seasonal variations and the risks posed by specific FTR purchases.

26. A number of parties filed comments asserting that the changes proposed by PJM do not go far enough to protect the PJM membership from substantial credit risk and losses resulting from undiversified counterflow FTR portfolios, citing the recent defaults by Exel Power Sources, LLC (Exel) and Power Edge.[10] Public Service Electric and Gas Company (PSE&G) and PSEG Energy Resources & Trade LLC (PSEG ER&T) (collectively PSEG Companies) argue that PJM's proposed tariff changes leave non-defaulting members exposed to approximately 50 to 80 percent of default risk associated with undiversified portfolios. PSEG Companies urge the Commission to require PJM to close the credit loophole associated with FTR counterflow transactions.

27. A number of parties propose specific ways in which PJM could strengthen its credit requirements, including adoption of mechanisms paralleling those of futures exchanges, requiring participants to have a minimum of $10,000,000 in assets, and allowing PJM to liquidate defaulted FTR positions to allow PJM to proceed against the defaulting party promptly in a legal proceeding.

28. Exelon Corporation (Exelon) and PSEG Companies object to PJM's proposal to delay the effective date of the instant revisions to April 1, 2008, asserting that the risk of further defaults exists on an ongoing basis. Some commenters urge the Commission to require PJM to implement the instant revisions immediately and make the to-be-filed revisions to address the risk of undiversified counterflow FTR holders effective February 1, 2008. Some commenters also assert that the tariff revisions should apply to current FTR positions, and that PJM should reevaluate the credit exposure associated with FTRs granted in the Summer 2007 FTR auction and immediately require participants whose open positions pose a greater credit risk to post additional collateral. The PPL Parties urge the Commission to consolidate the two proceedings as long as consolidation does not delay the issuance of an order.

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[10] PSEG Companies state that Exel was required to back its portfolio with only $3,000 of credit, but then incurred a $2.3 million loss on its FTR counterflow transactions, leading to a default on its payment obligations to PJM. PJM estimates Power Edge's payment defaults plus additional charges will be $80 million by the end of May 2008.

29. Citadel argues that PJM should adopt changes that clarify when payment on demands for collateral will be due under applicable PJM tariff provisions, as PJM's proposed revision states that "payment of additional Financial Security is due immediately upon notification of such modification and subject to the provisions of section VII below."[11] Citadel suggests a one-day period is reasonable. Citadel also contends that PJM should promptly make the changes that the Commission directed PJM to make in the October 26 Order to section V.I.H of Attachment Q concerning the transfer of credit obligations.[12]

30. DC Energy asserts that PJM's proposed change exacerbates a mechanism contained in the Credit Policy that is not just and reasonable, namely a requirement that the collateral required to participate in the auction, i.e., bid collateral, can be significantly greater than the maximum possible collateral requirement of the awarded portfolio (i.e., hold collateral). DC Energy protests the unnecessary requirement for bid collateral because it serves no business purpose while causing an undue burden on participants.

31. DC Energy explains that if a member bids to buy multiple FTRs from point A to point B at different prices in the same auctions, PJM requires bid collateral equal to the sum of all the expected values in the calculation. According to DC Energy, this is unjust and unreasonable because if the lower-priced bid is awarded, then the higher-priced bid must also be awarded at the same lower clearing price. But, DC Energy continues, PJM currently evaluates and requires collateral based on the higher bid price. DC Energy recommends that to compute the maximum possible hold collateral, PJM should: (1) group each FTR bid in an auction by source, sink, class and period; (2) for each group, compute the maximum possible hold collateral by iterating through each bid; and (3) assign the bid collateral to a group of bids to the maximum possible hold collateral. While DC Energy has suggested this change to PJM, it filed the limited protest so the Commission can act quickly to correct this flaw in PJM's proposal. DC Energy notes that all of the other ISO/RTOs that operate FTR type markets currently use a methodology similar to the one proposed by DC Energy.

c. <u>Answers</u>

32. PJM states that its Credit Working Group is currently considering most of the proposals recommend by Citadel and others and anticipates that it will include some or all of them in an additional filing later this year. PJM explains that it has moved forward with the most urgent aspects of its credit reform with the instant filing.

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[11] Attachment Q § II.B, Fourth Revised Sheet No. 523G.

[12] October 26 Order at P 35-36.

According to PJM, it is receptive to Citadel's proposals, but PJM does not believe it is necessary to circumvent the stakeholder process when the most significant reforms already have been put before the Commission.

33. PJM asserts in its answer that an effective date earlier than April 1, 2008 is not feasible. PJM explains that it cannot implement its proposal without the development of software capable of calculating collateral requirement in the manner that PJM proposes. However, the vendor working on the software informed PJM that they will have the new system completed and tested in time to meet the schedule that PJM proposed, but no earlier. PJM believes that attempting to force a more rapid implementation poses a risk of problems with implementation that does not offset the modest benefit of having the approach in place by April 2008, the last month of the current Planning Period during which this proposal could confer any benefit to participants in FTR markets. Accordingly, PJM encourages the Commission to refrain from ordering PJM to implement its proposal any earlier than requested by PJM.

34. In its answer, PJM explains that DC Energy identifies a defect with the proposed revisions and PJM agrees that if a participant submits multiple bids on the same line segment, at the same time and for the same directional flow, then for the reasons DC Energy provides, it is appropriate to establish the credit requirements on the basis of the bid combination that could produce the highest potential credit requirements rather than the sum of all bids, as now specified. PJM has no objection to the specific method that DC Energy proposes and is ready to craft a revision along these lines if directed to do so by the Commission. Otherwise, PJM states that it will include this item among additional revisions currently under consideration in the Credit Working Group.

35. In its response to PJM's answer, Citadel reiterates its support for PJM's proposal but again argues that there is need for further reforms to PJM's credit policy. Citadel believes there is urgent need to (1) clarify rights and obligations around collateral call and related default timing; (2) authorize PJM to suspend payments due to parties who have failed to perform on their financial obligation but are not yet in default; and (3) amend the tariff to allow PJM to terminate and liquidate FTRs upon a member's default. Citadel states that these reforms are critical and need to be implemented in connection with the annual FTR auction in April 2008. Citadel also urges the Commission to direct PJM to complete its review of various other credit policy changes applicable to the FTR markets, and to file them with the Commission in sufficient time so that the Commission may act upon the proposed changes prior to the FTR annual auction in April 2008. At a minimum, Citadel contends PJM should submit any additional proposals no later than April 1, 2008 so that the Commission can act and perhaps place them into effect by the start of the next FTR Planning Period. Citadel asserts that changing the Credit Policy rules in the middle of the auction process will inject uncertainty into the market and may raise the costs associated with participating in the auctions.

d. Commission Determination

36. We accept PJM's proposed tariff revisions, to become effective April 1, 2008, subject to conditions, as described below. PJM's revisions will better correlate its collateral requirements with the risk exposure in the FTR market by more precisely matching a participant's credit requirements with its actual FTR risks. For example, PJM's use of a monthly, rather than annual historical values for each FTR path in calculating its revised credit requirements, better reflects monthly congestion shapes and historical volatility, and allows PJM to return posted collateral more promptly to participants.

37. Protesters argue that PJM should make additional revisions to its collateral requirements. The Commission notes that PJM has already filed other revisions to its Credit Policy in Docket Nos. ER08-455-000 and ER08-520-000, and is still working with its stakeholders regarding collateral for FTR positions. We therefore do not see the need at this time to institute further procedures for additional revisions. Additionally, PJM stated in its answer that it will continue to consider the suggestions by participants to further enhance its credit requirements. The Commission, however, would like to be kept apprised of PJM's progress. We therefore direct PJM to file status reports on its progress of reviewing its Credit Policy every 90 days for a period of two years beginning on May 1, 2008. These reports, which will be for informational purposes only and will not be noticed or require Commission action, should include details of how the revisions accepted in this Order are working in the FTR market.

38. Some protesters request that we make these provisions effective earlier than the date proposed by PJM. PJM stated in its answer that it would not be able to implement the instant revisions sooner than April 1, 2008 due to the need to adequately test software implementation of the revisions. Under these circumstances, the Commission will make the filing effective April 1, 2008, as requested by PJM. With respect to PSEG Companies' request that the Commission require PJM to use the revised Credit Policy to reevaluate the credit exposure associated with FTRs granted in the summer 2007 FTR auction, we note that PJM's tariff provisions are effective on April 1, 2008. Therefore, we expect PJM to apply its revised credit policies as of this date.

39. With respect to Citadel's request that PJM comply with the Commission's October 26 Order concerning the transfer of credit,[13] we note that on January 28, 2007, PJM filed to clarify the provision, and we addressed its clarification in an order in that

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[13] *See* October 26 Order at P 35-36.

proceeding.[14] PJM, however, will have to file revised tariff sheets in this proceeding to reflect the outcome of its compliance filing in Docket No. ER07-1036-002.

40. The Commission will accept, subject to conditions, PJM's proposed revision to Attachment Q that requires payment of additional Financial Security "immediately." PJM does not define "immediately," and its meaning is ambiguous. As we stated in our October 26 Order,[15] customers need to be given some reasonable time period in which to provide additional Financial Security. PJM seems to argue that the provision's time period set out in section VII, titled "Events of Default," would apply to the payment of additional Financial Security. PJM, though, has not shown the provision in section VII dealing with default is analogous, because an event in which PJM determines additional Financial Security is required by a party is not equivalent to an event of default. Customers need to be given some reasonable, specified time period in which to provide additional Financial Security. Therefore, the Commission finds that PJM needs to review this provision and determine the most reasonable time period for FTR participants to submit additional Financial Security. The Commission accepts the proposed revision, subject to PJM filing a specified time period in a compliance filing due within 30 days of the date of this Order.[16]

41. The Commission will accept, subject to condition, PJM's proposed revision to Attachment Q § VI that would provide PJM with the ability to retain a defaulting Member's Financial Security for as long as such party's positions exist and for any residual period that PJM may deem appropriate. As we found in our October 26 Order, PJM has not specified in the proposed tariff any situations that it "may deem appropriate" to use this provision. The phrase is ambiguous; PJM should only be allowed to keep collateral for as long as the positions exist and the customer has not paid. We will therefore accept this proposed revision subject to PJM removing the phrase "and for any residual period that PJM may deem appropriate" in its compliance filing due within 30 days of the date of this Order.

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[14] *PJM Interconnection, L.L.C.*, Docket No. ER07-1036-002 (February 25, 2008) (unpublished letter order).

[15] *See* October 26 Order at P 32-33.

[16] In Docket No. ER07-1036, PJM stated that it intended to require a party subject to a call for additional Financial Security to provide such security within the three-day cure period currently established for parties in default. In the instant filing Citadel suggested a one-day period. In its compliance filing, PJM must fully support the number of days it chooses.

42. The Commission agrees with PJM that its bidding credit requirements are more appropriately based on the bid combination that could produce the highest potential credit requirements rather than the sum of all bids. Therefore, the Commission accepts PJM's agreement to file a revised bidding requirement provision along the lines proposed by DC Energy, within 30 days of the date of this Order.

C. Docket No. ER08-455-000

1. PJM's proposal

43. PJM's default allocation proposal seeks to allow PJM to require affiliated companies trading in FTR markets to be each other's guarantors in defined circumstances. Under this proposal, when a market participant establishes multiple affiliates to trade FTRs and then isolates a particular type of high-risk FTR position in one of the affiliates (i.e., when an affiliate has a "net short portfolio" of FTR positions) PJM would then have the right to set off the default against FTR market revenues that PJM would otherwise have paid to the defaulting company's affiliates and to apply such affiliates' posted security to the default to the extent that the security relates to the company's FTR positions.

44. In support of its filing, PJM states that under current default allocation rules a market participant could establish one affiliate to make risky bets on future congestion levels through net short FTR positions and set up another affiliate to hold offsetting (long) FTR positions. In this scenario, the affiliate that took the risk could default and walk away leaving other PJM members to cover the default while the other affiliate would continue to earn revenues from its FTR position.[17]

45. PJM contends that just such a situation occurred this fall with Power Edge, which has six affiliated companies that are members of PJM and that trade in the PJM markets. Power Edge and each of its affiliates are controlled by Tower Research Capital Investment (collectively Tower Companies), which acts as the managing member of each company and one individual is designated for all seven affiliates as the representative authorized to conduct PJM marketing activity on their behalf. PJM states that, out of the four affiliates that trade in concurrent flow and counterflow FTRs, Power Edge holds only risky, undiversified counterflow FTRs and is the only affiliate with a significant net short position.

46. PJM states that, due to warmer weather and an extended transmission outage, congestion along the relevant path was greater than the market and Power Edge

[17] Currently, when a PJM Member is in payment default, PJM spreads the amount in default across all Members.

anticipated. As a result, for the duration of the outage Power Edge now owes PJM for greater than anticipated congestion. Power Edge owed PJM $1.5 million for the November 2007 billing period. In December, PJM sent Power Edge a bill for this amount, but Power Edge defaulted. Due to the prospective defaults, PJM recently billed ower Edge $19.9 million for its December obligations. This amount was due on January 22, 2008, but as of the filing date (January 18, 2008) PJM assumed Power Edge would also default on this payment.

47. PJM states that it intends to impose the proposed revisions on Power Edge's affiliates after January 18, 2008. Since Power Edge holds the counterflow positions through May 31, 2008, PJM estimates that Power Edge will be liable for an additional $60 million.[18] However, during this same time period, PJM estimates that it will pay Power Edge's affiliates approximately $19 to $34 million on the concurrent flow FTRs they hold. In its filing, PJM proposes to cover a portion of Power Edge's losses by withholding the payments to Power Edge's affiliates. PJM would then make a default assessment on the remaining PJM members to cover any remaining default.

2. Comments and Protests

48. Several parties support PJM's proposal, requesting that the Commission approve PJM's proposal because the provisions are very limited in scope and will prevent some PJM members from shifting the risk of counterflow FTR positions to other non-affiliated PJM members. Several companies note that under the current rules they will be forced to cover Power Edge's default by paying out several million dollars while Power Edge's affiliates receive FTR revenues. Commenters state that PJM's proposal has been vetted through the stakeholder process and that the Commission should honor the decision. American Electric Power Service Corporation (AEP) contends that the proposed rule is prospective only since it applies to payments PJM owes the defaulting affiliate member as of January 19, 2008, the day following PJM's filing. Supporters also contend that this rule is necessary for the FTR market since it is an illiquid forward market.

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[18] Unless the Commission accepts PJM's proposal, under PJM's current default allocation rules, other PJM members will be forced to make up the entire approximately $80 million short fall. Under PJM's proposal and its projections, Power Edge's affiliates will offset about $40 million of that $80 million and PJM members will be responsible only for the remainder. Several protesters, however, state that PJM has since reduced the total estimated losses to $66 – 70 million.

49. The Tower Companies protest PJM's filing, and regarding the Power Edge default state that, in the May 2007 auction, Power Edge purchased a portfolio of both concurrent flow and counterflow FTRs with a collateral requirement of approximately $6.4 million and that another market participant, Exel, acquired a portfolio, which required collateral of $14.7 million. However, according to Tower Companies, Exel was unable to post the collateral and thus defaulted. Tower Companies state that it then spoke with PJM about possibly acquiring 20 to 50 percent of Exel's FTR portfolio, but PJM expressed technical concerns about transferring only a portion of Exel's portfolio. Tower Companies contend that PJM encouraged Power Edge to purchase the entire portfolio, knowing that such a purchase would leave Power Edge with a net short position, and permitted Power Edge to post only an additional $3 million in collateral instead of the required $14.7 million in collateral. Tower Companies state that PJM also permitted Power Edge to use that $3 million collateral to bid in future auctions. Accordingly, Tower Companies state that it never gamed or manipulated PJM's credit policy rules to gain an unfair advantage.

50. Tower Companies argue that PJM's proposal is retroactive ratemaking and, thus, violates the filed rate doctrine. Tower Companies state that PJM's proposal retroactively alters the default allocation provisions after companies have acquired the FTRs and posted the associated collateral. Tower Companies assert that the new obligation of affiliate guarantees is a significant change and should only be applied to prospective FTR purchases. Tower Companies assert that they agreed to financial terms for a fixed period of time, and, thus, had the right to expect that the material terms applicable to the acquired FTRs would also be fixed for the term for the FTR absent an express provision otherwise. Tower Companies claim that contrary to PJM's assertions, the proposal is not prospective even though it is seizing future profits, since those future profits were based on pre-existing FTRs and are being seized to offset past losses.

51. Tower Companies assert that PJM's proposal violates the sanctity of contracts and that PJM has not shown that it is in the public interest to alter the contracts. Tower Companies also argues that the default allocation rule imposes alter ego liability without a proper basis. Tower Companies maintain that PJM's proposal does not fall within the zone of reasonableness, is discriminatory against Power Edge affiliates, was accepted prior to a meaningful stakeholder review process, and will undermine the Commission's efforts to promote competitive energy markets. Finally, Tower Companies oppose PJM's requested waiver of the Commission's 60-day prior notice requirement.

52. Numerous other parties protest PJM's filing, asserting that PJM's proposal violates retroactive ratemaking principles since it will apply to previously conducted FTR trades. Exelon argues that PJM's proposal fails to consider, for example, that an affiliate may only have a 10 percent common ownership with the defaulting party or may have no control over or derive no benefit from the positions held by the defaulting affiliate. Several protesters assert that by ignoring corporate structure, PJM's proposal

is contrary to corporate law principles, and could conflict with bankruptcy provisions. Protesters also contend that PJM's proposal is overly-broad.

53. Protesters argue for properly and consistently applied credit and collateral provisions, which would prevent such costly defaults and are less extreme than PJM's proposed default allocation provision. DTE Energy requests that the Commission investigate Power Edge to determine whether it manipulated the market. DTE Energy also suggests that the Commission initiate a rulemaking proceeding that focuses solely on the unique risks faced by market participants in organized markets such as PJM.

3. PJM's Answer

54. In response, PJM states that its proposal does not entail piercing the corporate veil since it is not holding Power Edge's parent responsible for its default and that common law corporate piercing principles do not apply to the Commission's regulatory actions. PJM states that corporate guarantees are commonly approved by the Commission. Furthermore, PJM states that PJM's Operating Agreement currently provides that affiliate companies together may only cast a single vote and that the Commission was not required to satisfy corporate piercing standards before approving that provision. PJM asserts that its proposal does not violate retroactive ratemaking principles since it only applies to future, not past, defaults. PJM asserts that the cost of defaults are current costs to PJM members that did not exist prior to the default.

55. PJM further argues that contrary to Tower Companies' assertion, it is not required to make a public interest showing prior to changing the Operating Agreement. PJM asserts that the Operating Agreement provides that it may be amended with approval by the PJM Members Committee and the Commission upon a showing that the change is just and reasonable. PJM contends that its default allocation proposal is necessary because credit policy changes can not sufficiently remedy all risks of members obtaining net short FTR portfolios. PJM states that its proposal does not unduly discriminate against Tower Companies but applies to all companies that hold net short FTR portfolios. PJM also contends that its proposal will not harm competitive markets and was approved by its Members Committee. PJM disagrees with Tower Companies' description of the Power Edge default and asserts that Power Edge engaged in price manipulation that exacerbated its default.

4. Commission Discussion

56. The Commission will reject the filing in Docket No. ER08-455-000, because we do not find it just and reasonable. PJM states in its filing that it intends to apply the proposal to recover losses previously incurred by the Tower Companies in PJM's markets since May 2007. But the Commission's Office of Enforcement has already

instituted a non-public investigation of the Tower Companies to determine whether remedies are appropriate in the circumstances described by PJM.[19] That investigation, which began in January 2008, is the appropriate context in which to assess whether there has been a violation of the Commission's rules and if so, what remedy should be imposed.

57. Putting aside the circumstances surrounding the activities of the Tower Companies, we find that PJM's filing is too narrow to address the perceived flaw in its credit rules. PJM's filing treats affiliated companies participating in its FTR markets differently from companies without such affiliates. PJM asserts that companies with affiliates have motivations or incentives to create riskier investment strategies than non-affiliates. But the proper focus should be on establishing adequate credit requirements for all participants, regardless of their motivations. PJM has not established that its risks are limited to companies with affiliates. A company without an affiliate trading in PJM's FTR markets can take as risky or more risky positions than a company with such an affiliate, and PJM's proposal would not apply in this case. Indeed, two affiliated companies can each take risky positions that do not offset each other. PJM fails to explain why, if its proposed collateral requirements are sufficient in these situations, it should be entitled to an offset if it happens that an affiliate makes profits rather than incurs losses.

58. Companies have legitimate, non-manipulative reasons to establish affiliates, and we do not find it just and reasonable for PJM as a generic matter to impose a tariff provision that automatically takes the profits of one affiliate to offset against the losses of another separate corporate entity. Such cases must be analyzed on an individual basis, as we are doing with respect to the Tower Companies, rather than simply assuming that all uses of affiliates are suspect.[20] For instance, different investors may have different risk tolerances, and affiliated companies may acquire portfolios with differing risk characteristics commensurate with the risk profiles of their respective investors. For PJM automatically to offset earnings from one affiliate to cover the default of another would preclude investors from taking positions that reflect their level of risk tolerance. The appropriate protection in such cases is for PJM to ensure that its credit and other requirements provide sufficient protection depending on the risk profile of the individual company. In that case, investors in each affiliate would be required to

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[19] PJM also has recently filed a complaint regarding the activities of the Tower Companies in Docket No. EL08-44-000.

[20] As the Commission has found, "the parent company is not liable for the subsidiary's debts absent fraud or fundamental unfairness that warrant piercing the corporate veil." *SFPP, L.P.*, 121 FERC ¶ 61,240, at P 100 (2007). *See Conoco Inc. v. FERC*, 90 F.3d 536, 549 (D.C. Cir. 1996).

provide sufficient credit commensurate with the risk of their investment. PJM's filings in Docket Nos. ER08-376-000 and ER08-520-000 establish such collateral requirements, and we are accepting those filings. If PJM believes that the collateral requirements it has already filed are inadequate to the risks it faces, it should make appropriate additional filings.[21] We find, however, that it is not just and reasonable to adopt a provision that will address only a subset of the entities likely to face the credit risks presented, and that discriminates against certain companies based on their corporate form.

59. PJM argues that the Commission permits corporate guarantees as a means of providing sufficient collateral, and maintains that its proposal is just another form of corporate guarantee. The Commission has in the past allowed pipelines and utilities to offer companies the *option* of using corporate guarantees in lieu of or to reduce collateral requirements. PJM can certainly propose to allow companies to use corporate guarantees in this way as well. But the use of a corporate guarantee is an option, rather than a mandatory requirement as in PJM's proposal. Moreover, a corporate guarantee is not a substitute for PJM establishing appropriate collateral requirements for companies that choose not to use the corporate guarantee.

D. Docket No. ER08-520-000

1. PJM's proposal

60. In its filing in Docket No. ER08-520-000, PJM proposes further revisions to its Credit Policy to protect its members from defaults related to counterflow positions. PJM asserts that speculative positions require additional credit safeguards even where historical experience suggests that such positions likely would be profitable. This is because when participants adopt lop-sided positions on counterflows, they assume, regardless of past experience, an uncertain return that is not clearly bounded up or down. PJM's concern is not the likelihood of losses, but rather the unbounded aspect of losses, should they occur. Therefore, PJM proposes to apply a substantial increase to the credit requirement associated with such undiversified portfolios. In addition, PJM explains that outages of transmission lines can cause usage patterns to significantly deviate from prior experience, which may lead to enhanced geographical risks to counterflow positions heavily reliant on the availability of key assets that warrant a further increase in the credit requirement.

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[21] PJM is under no obligation to offer risky counterflow positions in its auction and also is not obligated to act as a guarantor in these situations. PJM could, for example, facilitate bilateral transactions where counterflows are involved so that the parties themselves can arrange for sufficient collateral to justify the risks they are taking.

61. PJM proposes to address risks of undiversified portfolios of counterflow FTRs by raising the credit requirement for such portfolios in the course of clearing FTR auctions. PJM maintains that the new requirements will not affect the credit requirement for prevailing flow FTRs or for portfolios of holdings that include counterflow FTRs that are sufficiently diversified. According to PJM, speculative positions on counterflows do not need to be discouraged because participants engaging in this activity constitute a useful component of the market. However, PJM is attempting to set a credit requirement that is appropriate for the risks associated with those speculative positions.

62. PJM proposes to include Section V.G in Attachment Q to subject tentative FTR Portfolio Auction Values (the sum, on a monthly basis across all FTRs, of the FTR prices times the FTR volume (MW)) to two tests. PJM will determine if portfolios are: (i) "FTR Flow Undiversified," meaning net counterflow, and if so, (ii) whether they are "FTR Geographically Undiversified," meaning unduly threatened by the expected or unexpected unavailability of a transmission asset that has been historically available. If the portfolio fails the first test, an additional incremental amount of credit equal to two times the absolute value of the net FTR Portfolio Auction Value shall be required. In addition, if the portfolio is FTR Geographically Undiversified, then a factor of three rather than two applies.

63. PJM will apply the tests as they clear FTR auctions (or auction rounds) on the basis of the bids received, possibly through several iterations. PJM states that if after running a tentative solution to an FTR auction, it determines that a participant must establish additional credit, the participant must do so by 4 p.m. the following day or PJM will remove the bids from the auction and run another solution. However, the deadline does not apply to additional iterations because PJM expects to identify the most serious problems initially and the process cannot continue indeterminately.

2. <u>Comments and Protests</u>

64. Exelon and Duke support PJM's proposal as a step in addressing serious default issues that have recently occurred in PJM's FTR market. Exelon asserts that the proposal will impose collateral requirements on market participants commensurate with the risk presented by their participation in the market, and better protect other market participants from the cost of defaults resulting from undiversified portfolios. Duke believes that PJM's proposal will minimize the default exposure that is created when market participants hold undiversified FTR positions and that the increased credit requirements are just and reasonable because the increase is proportional to the size of the undiversified portfolio. Duke states that the proposed revisions received overwhelming stakeholder support. However, Duke encourages PJM to fully review its credit policies to ensure that its recent credit filings do not have any unintended detrimental consequences.

65. AEP and Constellation Energy Commodities Group, Inc. and Constellation New Energy (collectively CEG Companies) also support PJM's proposal. AEP contends that PJM's proposal would help protect innocent PJM members from the socialization of defaults on risky, undiversified portfolios of counterflow FTRs. AEP contends that the multiplication factors PJM proposes to apply to the credit obligation of participants with such portfolios are supported by PJM's empirical analysis of the 2007-2008 annual FTR auction results. CEG Companies state that, in light of recent defaults due to undiversified portfolios of counterflow FTRs, the proposed tariff revisions are necessary, timely and a positive step to protect PJM members from bearing unwarranted default risk. The CEG Companies encourage PJM to review all facets of its Credit Policy to assure proper assessment of credit risks and PJM member protections.

66. PPL Parties support PJM's proposed revisions to its Credit Policy. PPL Parties state that the filing appropriately seeks to reflect both the net size of positions held by a market participant and the geographic risk associated with such positions. PPL Parties assert that it is inappropriate to permit market participants to engage in trading activity if the market participant does not have the ability to handle financial settlement when payment becomes due. PPL Parties state that the changes are critical to ensure that participants in PJM's FTR market have posted adequate credit should their positions be unprofitable at the time payments on the positions are due. PPL Parties state that the changes will decrease the extent of defaults in the FTR market and decrease the reliance on other market participants to pay for losses associated with unprofitable positions. PPL Parties urge the Commission to require PJM to conduct a full-scale review of its credit, settlement and related collection polices, and to compare its policies to the best practices of other Independent System Operators. PPL Parties state the Commission should direct PJM to make a compliance filing within four months regarding its review, either proposing additional tariff changes or explaining why no additional changes are required.

67. PSEG Companies request that the Commission accept PJM's proposal. PSEG Companies contend that the filing addresses the actual risks presented by transactions in the FTR counterflow markets and seeks to impose meaningful collateral requirements reflecting that degree of risk. However, PSEG Companies also request that the Commission direct PJM to make an additional filing by April 30, 2008 to implement certain credit enhancements, since this proposal is limited. The enhancements include: (1) a rigorous, up-front credit evaluation; (2) the establishment of corporate trading limits; (3) restrictions on the use of collateral; (4) a better definition of the circumstances triggering a member default; and (5) enhanced capabilities to measure and monitor member credit exposure in real-time. PSEG Companies are concerned that reliance on a stakeholder group is inadequate to address PJM's credit issues. Therefore, PSEG Companies request that the Commission convene a technical conference no later than April 30, 2008 to address credit issues in all of PJM's markets.

68. Members of the Financial Institutions Energy Group (FIEG) support the steps PJM takes in its proposal to protect its members from defaults. However, FIEG urges PJM to take additional steps because the current rules and practices do not adequately protect PJM members from the risk of default by other members. FIEG recommends that PJM (1) ensure that each proposed member satisfies minimum credit standards; (2) improve the methodology for collecting margin in relation to FTRs, including both initial and variation margin; (3) adopt rules and a practice, subject to system requirements, of terminating and liquidating member positions promptly after a default has occurred and not been rectified within the applicable cure period; (4) procure insurance or some other form of third party protection to absorb member default losses; and (5) have annual audits of the application of revised credit policies by PJM's independent auditors. Bear Energy LP, BE Allegheny LLC, BE Ironwood LLC and BE Red Oak LLC (collectively Bear Subsidiaries) also urge PJM to take the additional steps recommended by FIEG. Bear Subsidiaries request that the Commission convene a technical conference to discuss the recommendations and any related issues.

69. Financial Marketers support PJM's efforts to revise its credit policies to require undiversified participants to post more collateral for cleared FTR bids. However, Financial Marketers argue that PJM's current proposal does not produce results that ensure a market participant's collateral requirements are proportionate to risk. Therefore, Financial Marketers urge the Commission to reject the filing.

70. Financial Marketers argue that PJM's reliance on the overall cleared value of the FTR portfolio does not accurately reflect flow diversification and produces unreasonable results. Financial Marketers state that the cleared value of an FTR portfolio has little relation to the relative risk that a participant has assumed and cannot reliably be used as the basis for imposing additional collateral requirements. Financial Marketers assert that even an FTR portfolio consisting of both concurrent flow and counterflow positions with a net positive price can pose a significant threat of default if the counterflow position becomes highly negative. Financial Marketers contend that PJM's proposal incorrectly assumes that a prevailing FTR can never lose money or become a counterflow FTR over the course of a year, since congestion on a transmission path can change between the time of an FTR auction and when the FTR is settled due to atypical weather, unplanned transmission or generation outages or other causes. Financial Marketers believe PJM should develop path-specific credit requirements based on the economic risk in a FTR holding.

71. Financial Marketers assert that the geographic diversity test proposed by PJM is overly vague, does not adequately protect the market, and would impose substantial new collateral requirements without a rational basis. Financial Marketers explain that the geographic diversity test also ignores market participants whose total net portfolios clear at a positive price although there is still a risk of a loss. Financial Marketers state that the test does not provide participants with a transparent method of determining or even

verifying their FTR credit requirements so they cannot estimate their collateral requirements prior to participating in the auction. Financial Marketers object that PJM does not even list the criteria it will use in simulation models, nor how it will determine which network changes "substantially" affect the network. According to Financial Marketers, PJM gives no indication of how soon it will post the required credit information prior to an auction.

72. According to Financial Marketers, PJM's proposal requires, without rationale, market participants to post collateral far in excess of what is necessary to prevent a participant from defaulting and thus creates an unwarranted barrier to market entry, particularly for smaller participants, and could seriously decrease market liquidity by reducing the pool of FTR market participants. Financial Marketers state that the amount of collateral market participants must post is subject to large and unexpected changes if their portfolios are determined to be flow or geographically undiversified after the auction clears and market participants are given only a short period to obtain and post additional collateral after the auction closes. Financial Marketers contend that this is harmful to the market if a market participant does not satisfy the new credit obligation and the participant must forfeit its bid. After the participant's bid is removed, PJM must re-run the auction which may substantially affect the cleared positions of other market participants and possibly cause a cascading effect on more market participants. Thus, Financial Marketers claim that PJM's proposal creates harmful and unintended consequences that interfere with a well functioning market.

73. Financial Marketers argue that PJM's proposal fails to adequately address the effect of its new policies on seasonal and monthly FTR markets. Financial Marketers assert that the Commission must consider the impacts of the PJM proposal on each of the FTR markets when developing new credit requirements, not just analyze the proposal's effect on the annual FTR market. Financial Marketers urge the Commission to reject the proposed tariff revisions and also require PJM to conduct and report an impact analysis for both seasonal and monthly FTR markets to ensure that any proposed credit changes do not unduly impair trading in these markets.

74. DC Energy filed a protest stating that it agrees with the basic premise that PJM's current Credit Policy applicable to FTRs is generally inadequate with respect to handling volatile positions, such as those associated with counterflow positions, but PJM's proposed revisions are not just and reasonable and do not provide an adequate solution. DC Energy argues the proposed amendments are focused too narrowly on counterflow FTRs. DC Energy explains that PJM's proposal deems an FTR portfolio to be FTR Flow Undiversified if the net auction investment is negative and therefore fails to address an underlying issue, that the value and risk of an FTR is based on the specific conditions on the transmission system during the duration of the specific FTR owned. DC Energy elaborates that by narrowly focusing on paths with a negative clearing price only, without regard to the inherent riskiness of the path, the proposal does not

recognize and address the fact that the same problems associated with counterflow FTR positions also exist with prevailing flow FTR positions, which by their nature are equally volatile. According to DC Energy, there are many potential scenarios in which a non-counterflow path could become a counterflow path due to unforeseen system condition changes that act to reverse the local direction of power flow. DC Energy believes that PJM's Credit Policy should be amended to address more fundamentally the risks associated with both prevailing flow and counterflow FTR positions.

75. DC Energy objects to FTR portfolios with net positive auction investment not being subjected to the geographically undiversified test. DC Energy argues that the use of a power flow model and an arbitrary set of outages is fundamentally flawed and is an inadequate and ill-supported basis to forecast risk. DC Energy states that such fundamentals of market collateral requirements should be specified in advance and filed with the Commission after appropriate vetting. DC Energy asserts that this provides PJM with unwarranted discretion and fails to address the risks related to nominally positive clearing FTRs, which are subject to large or significant counterflow risks based on system conditions.

76. DC Energy asserts that the multiplication factors for undiversified portfolios are arbitrary and unjustified. DC Energy argues that the values are not based on any analysis and only appear to be part of an attempt by PJM to secure additional collateral and the values will result in over-collateralizing part of the market. DC Energy explains that clearing the auction subsequent to removing an under-collateralized market participant can create new requirements for other market participants, leading to a potential cascade of auction clearing scenarios, which may lead to a decrease in competition and liquidity. In addition, DC Energy states that this procedure provides option value to the under-collateralized market participant since they can decide whether or not to proceed when additional collateral is required, but better collateralized market participants do not get this option or second chance.

77. DC Energy favors establishing appropriate collateral levels for all FTR portfolios based on a forward market view of the specific FTR paths in an FTR portfolio and applying the concept of discounting collateral requirements for diversified or offsetting positions. DC Energy recommends a robust, path-level collateral policy with a process for reducing collateral for well-diversified portfolios. DC Energy also makes other recommendations, which include: (1) addressing the illiquidity and lack of price discovery inherent in these securities by conducting more frequent auctions; (2) adopting a formal "initial margin" methodology related to the maximum change in market value that the FTRs can experience in between auctions; (3) conducting a "variance margin" methodology related to the change in the mark-to-market value of a held portfolio; (4) developing a portfolio risk methodology to account for obvious correlation effects of FTR paths; (5) granting more robust default authority to the ISO/RTO wherein they are authorized to manage and dispose of a defaulting portfolio in

the most expedited and efficient manner to maintain the integrity of the markets; (6) requiring that all participants provide a form of liquid collateral such as cash, letter of credit, or comparable security; and (7) adopting a provision that participants should meet similar requirements as those of an "Eligible Commercial Entity" as defined in § 1a of the Commodity Exchange Act. DC Energy encourages the Commission to convene a technical conference and to order PJM to amend its Credit Policy to conform to widely accepted methods and processes to more effectively manage the risk inherent in the PJM FTR market.

3. Commission Discussion

78. We accept PJM's proposed tariff revisions in Docket No. ER08-520-000, to become effective April 1, 2008, as described below. As commenters requested in the proceeding in Docket No. ER08-376-000, PJM has given further consideration to credit in its FTR markets and the resultant instant filing provides added protection to PJM's members by increasing collateral requirements for undiversified FTR portfolio participants, thereby reducing the risk of their default. The filing received overwhelming support from stakeholders, an indication of their desire for additional measures to protect members from exposure to defaults. PJM's proposal only affects participants with net counterflow positions, and therefore will not affect the credit requirements of LSEs that hedge purchases to serve load. The proposal properly assesses higher collateral requirements against those that present additional risks. The proposal also should not prevent a robust FTR market, but it will help ensure that only participants who can financially handle the results of settlement will participate in trading.

79. The Commission also believes that this proposal, as well as PJM's proposal in Docket No. ER08-376-000, has been adequately supported so as to not require a technical conference in order for the Commission to make a reasoned determination on the merits. While we will accept PJM's instant proposal as a reasonable way to address the additional risks of undiversified portfolios, we expect PJM to continue to work on ways to further improve the assessment of risks that all FTR participants present and to provide appropriate credit requirements to protect against such risks. In its answer, PJM explains that it constituted a Credit Risk Management Steering Committee, open to all stakeholders, to consider all suggestions regarding credit that PJM's stakeholders may wish to consider. Thus, PJM and its members should continue to use the stakeholder process to develop appropriate ways to protect its members from such risks. In this regard, and as stated earlier, we will require PJM to provide informational reports to the Commission reporting on its progress.

80. Contrary to the assertions by Financial Marketers and DC Energy that PJM's proposal is too narrow, we find that PJM's proposal is a reasonable measure to protect market participants from the risk of undiversified portfolios. PJM's proposal focuses on

net counterflow portfolios because in PJM's view, as well as that of the overwhelming majority of affected market participants, such portfolios present the most risk to PJM's members, i.e., that of the unbounded aspect of losses that could result from counterflow FTR positions. Net counterflow FTR portfolios are more risky than a balanced portfolio because they are exposed to the volatility of changing congestion and the obligation is unknown and potentially unbounded; conversely, with concurrent flow FTRs, the obligation is known and fixed. For this reason, it is sensible to only apply the geographically undiversified test to FTR Flow Undiversified portfolios. Further, PJM's proposed use of a power flow model incorporating planned transmission outages in determining geographical diversification is also a reasonable way of assessing the potential changes that would affect the network and cause greater congestion and higher payment obligations for counterflow FTR holders. Additionally, PJM has committed to posting the planned outage information prior to the auctions, which should allow FTR participants to make advance preparations to deal with a possible increase to their FTR credit requirements based on their expected level of cleared trading activity. The need to adjust collateral positions is no different from requirements in other trading markets in which collateral requirements are adjusted depending on an assessment of value of the positions held.

81. The Commission agrees with PJM that its proposal should not create barriers for participants to enter the FTR market, as Financial Marketers claim. PJM's proposal establishes appropriate and reasonable collateral requirements, based on an assessment of risk that will enable all participants to trade so long as they have sufficient collateral to financially handle the consequent settlements without passing the costs of defaults onto all PJM members. While Financial Marketers argue that PJM's proposal is counterintuitive, it has not explained why participants receiving higher payments from PJM present a lower risk of default. It would appear that proportionately higher collateral requirements reflect the proportionately higher risk to the market that such counterflow positions present. Contrary to protestors' claim, re-runs of the auction should not harm the market, but instead should help because they will remove those participants that are unable to financially support their positions before settlement. PJM's proposal is not intended to discourage counterflow positions, but instead to act as a safeguard that allows financially qualified participants to make available more valuable flow for other participants. In addition, PJM's proposal is not only applicable to the annual FTR auctions as the tests are equally applicable to seasonal and monthly participants. Considering these factors, however, the Commission is interested in the effects of potential re-runs of the auction on the market. Therefore, to the extent that PJM is required to remove bids from the auction and run another solution, we direct PJM to include an analysis and discussion of such instances in the quarterly status reports required above.

82. DC Energy is incorrect that PJM's multiplication factors are unjustified and arbitrary. As both PJM and AEP explain, PJM's resultant multiplication factors are

based on the 2007/2008 annual FTR auction. The factor of two times the absolute value of the net FTR Portfolio Auction Value for undiversified portfolios was derived by analyzing the empirical results of the revenue performance of net counterflow portfolios that were obtained in the 2007/2008 annual FTR auction. The factor of three times the absolute value of the net FTR Portfolio Auction Value for Geographically Undiversified portfolios was derived by utilizing power flow analyses, which indicated that an average negative revenue impact related to potential transmission outage events on such undiversified portfolios was approximately three times the net FTR Portfolio Auction Value. Therefore, the Commission finds that PJM has adequately supported its use of its proposed factors.

83. Although DC Energy asserts that PJM's proposal will over-collateralize the market, it has not supported its assertion. Further, PJM explains that its bid collateral requirements are typically larger than cleared, so there will almost always be some available credit already in place by the time the undiversified calculation is made, so any collateral call will almost always be less than the full amount of the incremental adjustment.

<u>The Commission orders:</u>

(A) The tariff sheets submitted in Docket No. ER08-376-000 as listed in the Appendix A of this order are accepted, effective April 1, 2008, subject to conditions, and to PJM making a compliance filing within 30 days of the date of this order, as discussed in the body of this order.

(B) The tariff sheets submitted in Docket No. ER08-455-000 as listed in the Appendix A of this order are rejected, as discussed in the body of this order.

(C) The tariff sheets submitted in Docket No. ER08-520-000 as listed in the Appendix A of the order are accepted, effective April 1, 2008, and the requests for a technical conference are denied as discussed in the body of this order.

(D) Every 90 days, for a period of two years, beginning on May 1, 2008, PJM shall file a status report on its progress in further Credit Policy revisions, as discussed in the body of this order.

By the Commission. Commission Moeller dissenting in part with a separate statement attached.

(S E A L)

Kimberly D. Bose,
Secretary.

Appendix A

PJM Interconnection, L.L.C.
FERC Electric Tariff
Sixth Revised Volume No. 1

Tariff Sheets Accepted Effective April 1, 2008

Second Revised Sheet No. 523I.05a
Third Revised Sheet No. 523I.05b
Original Sheet No. 523I.05c
Fifth Revised Sheet No. 523L.01

Tariff Sheets Conditionally Accepted Effective April 1, 2008

Fourth Revised Sheet No. 523G
Second Revised Sheet No. 523I.05
First Revised Sheet No. 523I.05a
Second Revised Sheet No. 523I.05b
Third Revised Sheet No. 523J
First Revised Sheet No. 523J.01
Sixth Revised Sheet No. 523K
First Revised Sheet No. 523K.01
Fourth Revised Sheet No. 523L
Fourth Revised Sheet No. 523L.01
Fourth Revised Sheet No. 523M

PJM Interconnection, L.L.C.
Third Revised Rate Schedule FERC No. 24

Tariff Sheets Rejected

Fourth Revised Sheet No. 50
Original Sheet No. 50A
Third Revised Sheet No. 51

Appendix B

In Docket No. ER08-376-000 comments or protests were filed by:

Public Service Electric and Gas Company (PSE&G) and
PSEG Energy Resources & Trade LLC (PSEG ER&T) (collectively PSEG Companies)
Exelon Corporation (Exelon)
PPL Parties
DC Energy, LLC, and DC Energy Mid-Atlantic LLC (collectively DC Energy)
Certain PJM Stakeholders: Virginia Electric and Power Company, American Electric Power Service Corporation, Pepco Holdings, Inc., Old Dominion Electric Cooperative, Baltimore Gas and Electric, Constellation Energy Commodities Group, Inc., and Constellation NewEnergy, Inc. (collectively Joint Intervenors)
EPIC Merchant Energy, LP (EPIC) and SESCO Enterprises, LLC (collectively Financial Marketers)
Citadel Energy Products LLC, Citadel Energy Strategies, LLC, and Citadel Energy Investments Ltd (collectively Citadel)
Duke Energy Corporation (Duke)
Morgan Stanley Capital Group Inc. (MSCG)

In Docket No. ER08-455-000 comments or protests were filed by:

Accord Energy LLC, BJ Energy LLC, Franklin Power LLC, Ocean Power LLC,
Tower Research Capital LLC, and Tower Research Capital investments LLC (collectively Tower Companies)
Citadel
DTE Energy Trading, Inc.
Exelon, PPL Parties, PSEG Companies and Consolidated Edison Companies (jointly)
Dynegy Power Marketing, Inc.
Dominion Resources Services, Inc.
American Electric Power Service Corporation and Dayton Light and Power (jointly)
Allegheny Energy Companies
Designated FirstEnergy Companies
PJM Industrial Customer Coalition
Constellation New Energy, Inc. and Constellation Energy Commodities Group (jointly)
Managed Funds Association
Tenaska Power Services Company, Tenaska Fund Parties, Mirant Parties, Calpine Corporation and LS Power Associates, LP (jointly)

In Docket No. ER08-520-000 comments or protests were filed by:

Financial Marketers
DC Energy
PSEC Companies
Exelon
Duke

American Electric Power Service Corporation
Constellation Energy Commodities Group, Inc. and Constellation NewEnergy, Inc.
PPL Parties
Bear Energy LP, BE Allegheny LLC, BE Ironwood LLC, BE Red Oak LLC (collectively Bear Subsidiaries)
Financial Institutions Energy Group (FIEG)

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C. Docket Nos. ER08-376-000
ER08-455-000
ER08-520-000
(Not Consolidated)

(Issued March 25, 2008)

MOELLER, Commissioner dissenting, in part:

In Docket No. ER08-455-00, the Commission rejects PJM's proposal to amend the default allocation provisions in its Operating Agreement. I disagree with this decision.

PJM's proposal was narrowly tailored to address the very real situation of having a market participant use the existing default allocation rules to shift the risk of short FTR trades to other PJM market participants. Specifically, the proposal would have applied: (1) only in cases of actual defaults from net short portfolios of FTRs; (2) only to parties that have chose to separate their FTR trades among multiple entities; and (3) only to the extent of security posted and revenues owed to affiliates of the defaulting market participant. Notwithstanding the action that the Commission is taking today to strengthen PJM's credit policies in the two related dockets, I believe that revising the rules on the allocation of the costs of defaults would have provided a targeted solution to the specific problem where a market participant defaults after experiencing a substantial amount of unexpected congestion.

Additionally, PJM's tariff proposal would have prospectively allowed the grid operator to collect millions of dollars from a current defaulting market participant -- costs that will now largely, if not exclusively, be borne by all PJM members.

For these reasons, I respectfully dissent from the majority in Docket No. ER08-455-000.

Philip D. Moeller
Commissioner

EXHIBIT E

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C. Complainant, v. Accord Energy LLC BJ Energy LLC Franklin Power LLC GLE Trading LLC Ocean Power LLC Pillar Fund LLC Power Edge LLC Tower Research Capital LLC Tower Research Capital Investments LLC Respondents.	)))))))))))))))	Docket No. EL08-___-000

COMPLAINT
OF PJM INTERCONNECTION, L.L.C.
AGAINST ACCORD ENERGY LLC, BJ ENERGY LLC, FRANKLIN POWER LLC, GLE TRADING LLC, OCEAN POWER LLC, PILLAR FUND LLC, POWER EDGE LLC, TOWER RESEARCH CAPITAL LLC, AND TOWER RESEARCH CAPITAL INVESTMENTS LLC

Pursuant to sections 206, 222, and 306 of the Federal Power Act, 16 U.S.C. §§ 824e, 824v, and 825e, and Rule 206 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("Commission"), 18 C.F.R. § 385.206, PJM Interconnection, L.L.C. ("PJM") submits this Complaint against Accord Energy LLC ("Accord"), BJ Energy LLC ("BJ Energy"), Franklin Power LLC ("Franklin Power"), GLE Trading LLC ("GLE Trading"), Ocean Power LLC ("Ocean Power"), Pillar Fund LLC ("Pillar"), Power Edge LLC ("Power Edge") (collectively "Fund Companies"), Tower Research Capital LLC ("TRC"), and Tower Research Capital Investments LLC

("TRCI") (collectively "Tower Companies" or "Respondents") concerning their manipulation of the PJM market.

In this Complaint, PJM shows that:

1. The Fund Companies manipulated the PJM financial transmission rights ("FTR") market and day-ahead energy market, distorting energy prices and payments to FTR holders, in violation of the Commission's regulations prohibiting market manipulation, 18 C.F.R. § 1c.2.

2. One of the Fund Companies, Power Edge, which experienced substantial losses in the PJM market, may have fraudulently distributed monies out of Power Edge, and otherwise intentionally withheld cash on hand that could have been used to pay its obligations, choosing instead to default and have other PJM members cover its losses, effecting a fraud upon the PJM market participants in violation of 18 C.F.R. § 1c.2.

3. In view of these violations of the Commission's market manipulation rule, the Commission should order the Fund Companies to disgorge all of their unjust revenues and profits resulting from their market manipulations, to PJM and its adversely affected members.

4. In view of these violations, the Commission also should impose civil penalties upon the Fund Companies in connection with their manipulation of the markets.

5. The Commission further should issue a remedial order prohibiting the Tower Companies (and their affiliates, including future affiliates) from participating in the PJM markets.

6. The Commission should institute an investigation, including holding a public hearing, and providing interested parties, including PJM, an opportunity for discovery, regarding the Fund Companies' manipulative and fraudulent conduct.[1]

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[1] In a separate proceeding, PJM has sought generic changes to the Restated and Amended Operating Agreement of PJM Interconnection, L.L.C., Third Revised Rate Schedule FERC No. 24 ("Operating Agreement") to address certain defaults on FTR counterflow positions, which would require certain of the Tower Companies' current revenues associated with FTR positions to be used to offset Power Edge's default. See PJM Filing, Docket No. ER08-455-000 (Jan. 18, 2008). The instant Complaint seeks disgorgement of all unjust revenues and profits of the Funds Companies commencing June 2007, not just current FTR revenues, and seeks additional remedies.

I. EXECUTIVE SUMMARY.

1. As shown in this Complaint, the Tower Companies have violated the Commission's prohibition against energy market manipulation. The Tower Companies have knowingly or recklessly used a device, scheme, or artifice to defraud, and engaged in acts, practices, or courses of business that operate as a fraud or deceit in connection with the purchase or sale of electric energy or transmission of electric energy subject to the Commission's jurisdiction. The Tower Companies' actions impaired and obstructed PJM's day-ahead energy and FTR markets. In particular, among other things, the Tower Companies engaged in fraudulent trading activities to benefit the financial position of some affiliates, by creating congestion and distorting the value of FTRs and locational marginal prices ("LMPs"), while adversely affecting the financial position of another affiliate, Power Edge, that the Tower Companies knew would default on its obligations to PJM, causing all other members to bear the cost of the default.

2. The Tower Companies' manipulative and fraudulent conduct falls into four categories of manipulation: (1) collusion among affiliates so as to purchase offsetting FTR positions for the gain of one or more affiliates, while maintaining and continuing a large loss in another affiliate known to be unable to pay its obligations; (2) virtual bidding in the day-ahead energy market, intentionally increasing congestion in order to enhance the financial value of one affiliate's FTRs, while at the same time enlarging the known default of another affiliate's counterflow FTR position, adversely affecting all other PJM members that have to cover the default; (3) the apparent intentional and fraudulent distribution of funds out of one of the Fund Companies, Power Edge, at a time when the company had no earnings and had only experienced, or

expected to experience, near-term losses from its large porfolio of counterflow FTRs, thereby reducing the cash available to pay its obligations and increasing the amount of the default that the PJM members will have to cover; and (4) the intentional and fraudulent withholding of payment on counterflow FTR obligations by one of the Fund Companies, Power Edge, even though it had cash on hand from which it could pay, thereby creating greater default obligations for PJM members to cover.

Coordinated Offsetting Positions

3. Through their concerted efforts, at least two of the Fund Companies coordinated to purchase offsetting FTR positions. One such affiliate, Power Edge, purchased counterflow FTR positions in the annual FTR auction, ran into serious financial difficulty from losses on the positions, and then defaulted, and likely will continue to default, on its past and continuing obligations in the tens of millions of dollars, all of which will have to be covered by the other PJM members. After running into this financial difficulty, the same trader, on behalf of another affiliate, BJ Energy, purchased offsetting FTR positions in PJM's monthly FTR auctions. Based on PJM's analysis, at least approximately 50% of the FTRs purchased by BJ Energy are in locations known to provide offset to Power Edge's poor performing counterflow FTRs. Had the BJ Energy FTR positions been held by Power Edge, then they would have hedged and offset the losses of Power Edge reducing the default the PJM members must cover. By taking counter positions in BJ Energy, managed by the same company and trader, and probably with the same or similar investors as Power Edge, the Tower Companies profited from the BJ Energy positions with the intent to keep those profits, while Power Edge continued its large defaults, which the PJM members must cover.

4. Through January 2008 activity, Power Edge's default is approximately \$37 million, and through the end of the 12 months for which its FTRs were purchased is expected to be over \$50 million. Its affiliate, BJ Energy, has earned approximately \$10.4 million in net revenues from its activities in PJM FTR markets for June 2007 through February 2008, much of which is attributable to the offsetting FTR positions it purchased.[2] If the common trader for these companies had placed all of the FTR positions in Power Edge, its default would have been less. Therefore, BJ Energy's unjust profits should be disgorged and used to offset Power Edge's default, decreasing the amount of the default the PJM members must cover.

5. Through their coordinated conduct, the Fund Companies knowingly or recklessly violated the Commission's anti-manipulation rules. The common portfolio manager and trader for both Power Edge and BJ Energy, likely acting on behalf of the same or similar investors, raises the clear inference of intentional and coordinated actions to defraud PJM and the PJM members. As Commissioner Moeller recently stated, "market participants are not entitled to structure their transactions with the expectation that they could default and impose a burden on other market participants (and ultimately, the ratepayers) to cover their outstanding charges and losses."[3] With further investigation, the Commission also can determine whether other Tower Companies

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2 As discussed below, BJ Energy is required to forfeit approximately \$2.4 million of this amount pursuant to section 5.2.1(b) of the Appendix to Attachment K of the PJM Open Access Transmission Tariff, FERC Electric Tariff, Sixth Revised Volume No. 1 ("PJM Tariff"). See also Schedule 1 of the Operating Agreement, which is identical to the Appendix to Attachment K of the PJM Tariff.

3 New England Power Pool, 122 FERC ¶ 61,189 (2008) (Moeller, P., concurring).

trading through the same individual trader, or in concert with other traders, similarly produced additional unjust profits which should be disgorged.

Manipulative Virtual Trading

6. During December 2007 and January 2008, BJ Energy submitted increment and decrement bids (so called "virtual bids") in the day-ahead energy market which appear to have been purchased intentionally to increase congestion on FTR paths for which BJ Energy had purchased prevailing flow FTRs. As a result, BJ Energy distorted LMP prices and unjustly profited on its FTR positions. Moreover, because BJ Energy's prevailing flow FTRs were offsetting to Power Edge's counterflow FTRs, BJ Energy's virtual bids exacerbated the level of the Power Edge default – a default which now must be paid by other PJM members. Through these actions, the Fund Companies fraudulently distorted the values of LMPs and FTRs such that the prices in the FTR and day-ahead energy markets were not set solely by legitimate market forces.

7. Based on a representative ten-day sample during December 2007 and January 2008, BJ Energy's virtual bidding at only two nodes produced increased congestion from which BJ Energy earned unjust FTR profits of $183,000, which is equivalent (based on the sample) to unjust profits of more than half a million dollars a month. During the same ten days, BJ Energy's virtual bidding devalued Power Edge's counterflow FTR positions by $480,253, or the equivalent (based on the sample) of nearly $1.5 million a month, which other PJM members now must bear. The Commission should order the disgorgement of all unjust profits of the Tower Companies to PJM and its members to ameliorate the effects of this manipulation.

8. BJ Energy's virtual bidding also decreased the value of all other counterflow FTRs on paths opposite to FTRs held by BJ Energy. Over the ten-day

period, the increased losses to other holders of counterflow FTRs amounted to approximately $600,000, which is equivalent (based on the sample) to over $1.8 million a month.

9. BJ Energy's virtual bidding in order to benefit its FTR positions also distorted LMP values in the day-ahead energy market, increasing energy prices in several load zones. For the ten-day sample period, the resulting rise in zonal prices in the day-ahead energy market for the Jersey Central Power and Light Company ("JCPL"), Pennsylvania Electric Company ("PENELEC"), Public Service Electric and Gas Company ("PSEG"), and Rockland Electric Company ("RECO") zones caused purchasers to pay over $1.3 million, or the equivalent (based on the sample) of close to $4 million a month, which they would not have had to pay absent BJ Energy's manipulative bids. Fortunately, the PJM Market Monitoring Unit detected this conduct and PJM informed the Tower Companies, which appeared necessary in order to bring an end after two months to the conduct and the continuing harm to the market. Otherwise, the increased prices to energy purchasers might be continuing today. The Commission should investigate all virtual trading by the Tower Companies to determine the full extent of the manipulative trading, determine the profits of the Tower Companies and the harm to the markets, and order disgorgement of all unjust profits.

Fraudulent Distribution of Capital

10. On information and belief, Power Edge may have distributed funds to its investors or shareholders, reducing the cash available to pay its obligations on its counterflow FTRs, which PJM members now must cover. On information and belief, Power Edge may have returned several million dollars of funds to its investors, even though it had no earnings and had only experienced, or expected to experience, near-term

losses on its positions in the PJM markets. If Power Edge had used these funds to pay its obligations, rather than distributing the money out of the company, the amount of its default would have been reduced, and the amount the PJM members would have to cover would be significantly reduced. The Commission should find that Power Edge's transfer of assets out of the company, rather than paying its bills, was a fraud and deceit upon the PJM market.

Intentional Non-Payment

11. Finally, Power Edge intentionally withheld payment on its counterflow FTR obligations, notwithstanding holding funds from which it could pay, thereby fraudulently defaulting and creating greater obligations for PJM members to cover in connection with the default. Upon information and belief, Power Edge had cash on hand, yet it refused to make any payment on a bill from PJM for November of only $2.3 million. Thus, Power Edge purposefully defaulted on the November bill, effectively transferring the obligation to the PJM members. This intentional non-payment, when funds were available, was a fraud and deceit upon PJM and its members.

* * *

12. As a result of their manipulative and fraudulent conduct, PJM believes the Tower Companies to date have caused harm to the PJM members exceeding $20 million. Investigation by the Commission may reveal further manipulation and the full extent of the harm to the PJM members.

13. Accordingly, the Commission should (i) find that the Fund Companies violated the Commission's anti-manipulation rules; (ii) direct BJ Energy to disgorge its unjust profits and refund, at a minimum, the known approximately $10.4 million it has earned to date in unjust profits (less any previously forfeited amounts) resulting from its

manipulative behavior during the current planning year; (iii) following investigation, direct the Fund Companies to disgorge any other unjust profits that are determined and refund them to affected entities; (iv) initiate an enforcement investigation, and order a public hearing, to investigate the conduct and behavior of the Tower Companies and determine all violations of the Commission's anti-manipulation rule; (v) allow discovery by PJM and others to fully determine the extent of the coordinated activities of the Tower Companies and their manipulative and fraudulent conduct;[4] (vi) assess civil penalties upon the Tower Companies; and (vii) issue a remedial order prohibiting the Tower Companies (and any of their future affiliates) from future participation in the PJM markets.

II. BACKGROUND

A. Description Of The Parties.

1. PJM

14. PJM is the independent regional transmission organization ("RTO") for 13 states and the District of Columbia.[5] PJM is authorized by the Commission to administer an open access transmission tariff, operate energy and other markets, and otherwise conduct the day-to-day operations of a multi-state bulk power system. Among other

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4 The Tower Companies are private investment companies or hedge funds. See note 6 and accompanying text, infra. Information as to the business operations, ownership, financial structure, and interlocking relationships of these companies is notoriously limited and non-public. In order for PJM to begin to understand the full extent of impropriety at issue here, PJM must be permitted to conduct discovery.

5 PJM is an approved RTO. PJM Interconnection, L.L.C., 101 FERC ¶ 61,345 (2002).

things, PJM operates a day-ahead energy market, a real-time energy market, markets for ancillary services, and markets for the sale and purchase of FTRs.

2. Tower Companies

15. The Tower Companies are a group of affiliated companies. According to the Fund Companies, each is a private investment fund.[6] Additionally, each of the Fund Companies is a PJM member and trades in the PJM markets. Specifically, each is or has been active in the day-ahead energy market, through the submission of so-called "virtual" bids and offers, and several have been active in purchasing FTRs through PJM's annual quarterly, and monthly FTR auctions.[7] TRC manages BJ Energy and Power Edge, while TRCI manages Accord Energy, Franklin Power, and Ocean Power.[8] The Fund Companies have conceded that they have some common management and each of the Fund Companies are affiliates of the other Fund Companies.[9] Some of the Fund Companies may have substantially identical investors.[10] As discussed below, the same trader conducted all transactions on behalf of multiple affiliates in PJM's markets.

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6 Protest of the Tower Companies, Docket No. ER08-455-000, at 10 (Feb. 15, 2008) ("Tower Companies' February 15 Filing"). In the Affiliate Disclosure Forms they submitted to PJM, several of the Fund Companies identified themselves as affiliates and TRCI is their ultimate parent.

7 Five of the Fund Companies trade in FTRs: Accord, BJ Energy, Franklin Power, Ocean Power, and Power Edge.

8 See Motion to Intervene and Motion for Extension of Time of TRC, TRCI, Accord Energy, BJ Energy, Franklin Power, and Ocean Power, Docket No. ER08-455-000, at 2 (Feb. 6, 2008).

9 Tower Companies February 15 Filing at 10.

10 Tower Companies have refused to reveal their investors to PJM. Discovery will be necessary to learn the full extent of the commonality of investors in the Fund Companies.

B. Description Of The Markets.

1. FTRs and Counterflow FTRs

16. FTRs are rights to receive transmission congestion credits.[11] The holder of an FTR is entitled to credits of transmission congestion charges for the period specified in the corresponding auction.[12] FTRs are identified by term, megawatt quantity, and receipt and delivery points. The hourly economic value of an FTR obligation is based on the difference between the day-ahead congestion price at the delivery and receipt points.

17. PJM holds annual, quarterly, and monthly auctions to allow market participants to purchase and sell FTRs.[13] The annual auction covers each of the 12 months comprising the annual planning period (June through May). Additional monthly and quarterly auctions are held throughout the year for individual or strips of months within the planning period.

18. An FTR is a prevailing flow FTR when its source price is lower than its sink price, indicating that the FTR consumes valuable transmission flow capability relative to projected transmission constraints. A prevailing flow FTR has a positive purchase price, or charge, that the purchaser commits to pay in the FTR auction. A prevailing flow FTR is expected to yield a positive revenue stream to the FTR holder.

19. By contrast, an FTR is a counterflow FTR when its source price is higher than its sink price, indicating that the FTR releases valuable transmission flow capability

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[11] See PJM Tariff, Attachment K-Appendix, §§ 1.3.5, 5.2.2.

[12] Id. § 7.1.3.

[13] Id. § 7.1.

by providing flow in the opposite direction relative to a transmission constraint. A counterflow FTR has a negative purchase price, reflecting that the auction participant will be paid to take on the costs and risks of holding a counterflow FTR. A counterflow FTR is expected to result in a negative revenue stream, i.e., a payment obligation, to the FTR holder.

20. A prevailing flow FTR holder will incur a monthly charge for purchasing an FTR in the annual or monthly auction. The FTR holder then expects to receive revenues in the day-ahead energy market based on the value of the FTR as determined by LMP differences between the FTR source and sink. For load-serving entities, these FTR revenues will in turn offset congestion charges that may be paid by the market participant for delivering energy to its load in the day-ahead energy market. Similarly, a counterflow FTR holder can use a forward purchase of an FTR to hedge a counterflow energy delivery in the day-ahead energy market. In this case, the FTR holder will receive a monthly credit for acquiring a counterflow FTR in the annual or monthly auction. This FTR holder then expects to pay congestion charges in the day-ahead energy market based on the value of the FTR as determined by LMP differences between the FTR source and sink. For load-serving entities, these FTR-based congestion charges will in turn be offset by any congestion credits that may be paid to the market participant for delivering energy to its load that results in flow opposite the constrained flow in the day-ahead energy market.

21. Companies that purchase and sell FTRs solely to arbitrage the price differences between FTR auctions or between the FTR auction and the day-ahead energy market tend to be financial market participants with sophisticated risk management departments to control their financial exposure. These market participants are not

motivated to match energy deliveries with FTR positions because they have no load serving responsibility. Rather, their open FTR positions will generate revenue if their forward FTR purchases are well managed. Since FTRs and transmission congestion charges are quite volatile and their FTR positions may not be matched with energy deliveries, most financial participants maintain a balanced portfolio of prevailing flow and counterflow FTRs to manage their risk appropriately.

22. Prevailing flow FTR positions tend to be profitable when actual congestion charges in the day-ahead energy market are higher than the expected congestion charges. Counterflow FTR positions tend to be profitable when actual congestion charges in the day-ahead energy market are lower than the expected congestion charges. Since actual congestion charges can be impacted by unexpected events, most financial participants have diverse portfolios of both prevailing flow and counterflow FTRs, coupled with virtual energy positions, in order to limit their financial exposure and manage their overall risk.

2. Increment and Decrement Bids in the Day-ahead Energy Market

23. The day-ahead energy market is a forward market in the sense that hourly clearing prices are calculated for each hour of the next operating day based on generation offers, demand bids, and bilateral transaction schedules submitted into the day-ahead energy markets.[14] The price calculations are based on LMP in the day-ahead energy market. The day-ahead energy market provides price certainty and gives market participants the ability to lock in prices in the day-ahead energy market. All day-ahead

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14 PJM Tariff, Attachment K-Appendix, §§ 1.3.1C, 1.10 through 1.12.

purchases and sales are settled at day-ahead prices. The results of the day-ahead energy market are binding financial commitments of market participants. In addition, all payments arising from FTR positions are settled in the day-ahead energy market.

24. The real-time market (balancing market) includes prices based on actual system operating conditions. Market participants pay balancing prices (real-time LMP) for any demand that exceeds or generation that is below their day-ahead schedule, but will receive revenue (real-time LMP) for demand deviations below or generation above their day-ahead scheduled amounts. Transmission customers pay congestion charges (or receive congestion credits) for bilateral transaction quantity deviations from day-ahead schedules. All spot purchases and sales in the balancing market are settled at the balancing prices.

25. Market participants also may submit "increment" and "decrement" bids, so-called virtual bidding,[15] in the day-ahead energy market. Decrement bids are bids to purchase energy at a specified location in the day-ahead energy markets, and accepted decrement bids result in scheduled load at the specified location in the day-ahead energy market.[16] An increment bid is an offer to sell energy at a specified location in the day-ahead energy market, and an accepted increment bid results in scheduled generation at the specified location in the day-ahead energy market.[17]

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15 Id. § 1.10.1A(i).

16 Id. § 1.3.1E.

17 Id. § 1.3.9A.

3. Prohibition of FTR Manipulation Through Increment and Decrement Bidding

26. The PJM Tariff and Operating Agreement also include provisions to address the potential for market manipulation using increment and decrement bids. These anti-manipulation provisions, a part of the market rules since December 2000,[18] were added to eliminate any "incentive [for market participants] to use Increment and Decrement Bids in the Day-ahead Market to increase congestion and artificially raise the value of the FTRs."[19] Because a holder of an FTR receives as a transmission congestion credit a share of the transmission congestion charges between the source and sink points of the FTRs, it has an incentive to make virtual bids that affect congestion. To eliminate such potential gaming in the day-ahead energy market, the market rules provide that, in certain circumstances, revenues an FTR holder receives because its increment or decrement bid increased congestion are required to be forfeited.

27. Specifically, the PJM Tariff provides:

> If a holder of a Financial Transmission Right between specified delivery and receipt busses acquired the Financial Transmission Rights in a Financial Transmission Rights Auction . . . and (i) had an Increment Bid and/or Decrement Bid that was accepted by the Office of Interconnection for an applicable hour in the Day-ahead Energy Market for delivery or receipt at or near delivery or receipt busses of the Financial Transmission Right; and (ii) the result of the acceptance of such Increment Bid or Decrement Bid is that the difference in locational marginal prices in the Day-ahead Energy Market between such delivery and receipt busses is greater than the difference in locational marginal prices between such delivery and receipt busses in the Real-time Energy Market, then the

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18 PJM Interconnection, L.L.C., Letter Order, Docket No. ER01-773-000 (Jan. 26, 2001) (letter order accepting tariff revisions incorporating section 5.2.1(b) and (c) in the Appendix to Attachment K of the PJM Tariff and Schedule 1 of the Operating Agreement).

19 PJM Filing, Docket No. ER01-773-000, at 3 (Dec. 22, 2000).

> Market Participant shall not receive any Transmission Congestion Credit, associated with such Financial Transmission Right in such hour, in excess of one divided by the number of hours in the applicable month multiplied by the amount that the Market Participant paid for the Financial Transmission Right in the Financial Transmission Rights Auction.

PJM Tariff, Attachment K-Appendix, § 5.2.1(b). For purposes of this section, "a bus shall be considered at or near the Financial Transmission Right delivery or receipt bus if seventy-five percent or more of the energy injected or withdrawn at that bus and which is withdrawn or injected at any other bus is reflected in the constrained path between the subject Financial Transmission Right delivery and receipt busses that were acquired in the Financial Transmission Rights Auction." Id. § 5.2.1(c).

C. Power Edge Default.

28. Power Edge holds a net short portfolio consisting of over 14,000 MW of counterflow FTRs that require it to make payments to PJM when congestion occurs between identified PJM nodes. Power Edge undertook this obligation in the PJM FTR auctions, and by purchasing bilaterally FTR positions another market participant undertook in the auctions, and as a result receives a specified payment stream from its FTR holdings. Power Edge receives approximately one-twelfth of its auction payment stream each month from PJM, less the amounts Power Edge must pay each month on the counterflow FTRs when there is congestion on the paths. Presumably, Power Edge anticipated that the payment streams it would receive from the auction clearing prices would exceed the amounts it would pay on its counterflow FTR positions. In other words, it believed that congestion would be less than the market, in the FTR auctions, expected on the acquired FTR paths.

29. Power Edge seriously miscalculated. As a consequence of warmer weather than typical this past fall and, more importantly, an extended planned

transmission outage that commenced in late November, Power Edge's position deteriorated significantly and it defaulted on its obligations to PJM. Power Edge was billed in December 2007, approximately $2.3 million for its November 2007 market activity, and defaulted on that payment obligation. Power Edge also defaulted on its payment obligation of approximately $19.9 million for market activity pertaining to December 2007 (billed in January 2008), and defaulted again on its payment obligation of approximately $16.0 million for its market activity pertaining to January 2008 (billed in February 2008). PJM estimates that Power Edge will be liable for substantial additional amounts on its counterflow positions pertaining to the remainder of the planning period for which it holds FTR positions, i.e., through May 31, 2008.

30. Under current Operating Agreement provisions, all PJM members are required to pay for Power Edge's default. These payments by other PJM members, however, do not alleviate Power Edge's responsibility for the amount it owes PJM.[20]

III. THE COMMISSION'S PROHIBITION OF ELECTRIC ENERGY MARKET MANIPULATION.

31. Section 222(a) of the Federal Power Act, 16 U.S.C. § 824v(a), added by the Energy Policy Act of 2005,[21] sets forth the prohibition of market manipulation. It states:

> It shall be unlawful for any entity . . . directly or indirectly, to use or employ, in connection with the purchase or sale of electric energy or the purchase or sale of transmission services subject to the jurisdiction of the Commission, any manipulative or deceptive device or contrivance . . . in contravention of such rules and regulations as the Commission may

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[20] Operating Agreement, §§ 5.2, 5.2.2.

[21] Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594, § 1283 (2005).

> prescribe as necessary or appropriate in the public interest or for the protection of electric ratepayers.

16 U.S.C. § 824v(a).

32. In Order No. 670,[22] Prohibition of Energy Market Manipulation, the Commission promulgated new regulations on market manipulation to implement section 222 of the Federal Power Act. Specifically, a new section 1c.2(a) of the Commission's regulations provides:

> It shall be unlawful for any entity, directly or indirectly, in connection with the purchase or sale of electric energy or the purchase or sale of transmission services subject to the jurisdiction of the Commission,
>
> (1) To use or employ any device, scheme, or artifice to defraud,
>
> * * *
>
> (3) To engage in any act, practice, or course of business that operates or would operate as a fraud or deceit upon any entity.

18 C.F.R. § 1c.2(a).

33. In Order No. 670, the Commission clarified it will act on a claim of manipulation where an entity:

> (1) uses a fraudulent device, scheme or artifice . . . or engages in any act, practice, or course of business that operates or would operate as a fraud or deceit upon any entity;
>
> (2) with the requisite scienter;
>
> (3) in connection with the purchase or sale of . . . electric energy or . . . transmission of electric energy subject to the jurisdiction of the Commission.

Order No. 670 at P 49; see also Amaranth Advisors L.L.C., 120 FERC ¶ 61,085, at P 44, reh'g denied, 121 FERC ¶ 61,224 (2007) ("Amaranth").

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22 Prohibition of Energy Market Manipulation, Order No. 670, III FERC Stats. & Regs., Regs. Preambles ¶ 31,202, reh'g denied, 114 FERC ¶ 61,300 (2006).

34. In Amaranth, the Commission provided guidance with respect to the three elements required for the Commission to find that an entity has violated the Commission's prohibition on market manipulation. The Commission defined fraud "generally to include 'any action, transaction, or conspiracy for the purpose of impairing, obstructing or defeating a well-functioning market.'"[23] Further, in Amaranth, the Commission explained that "energy market participants may be deceived or defrauded where one market participant trades with the intent to artificially affect the price of a physical or financial energy product" with the result that "the price is no longer set solely by the legitimate forces of supply and demand."[24] Additionally, while the Commission has recognized that "[f]raud is a question of fact that is to be determined by all the circumstances of the case[,]"[25] it explained that its rule prohibiting market manipulation "is an intentionally broad proscription against all kinds of deception, manipulation, deceit and fraud."[26]

35. Regarding scienter, the Commission explained in Order No. 670 that both knowing and intentional misconduct, and recklessness, satisfy the scienter element.[27] As the Commission explained in Amaranth, "for the Anti-Manipulation Rule to apply 'the

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23 Amaranth, 120 FERC ¶ 61,085, at P 45 (citing Order No. 670 at P 50).

24 Amaranth, 120 FERC ¶ 61,085, at P 45.

25 Order No. 670 at P 50.

26 Amaranth, 120 FERC ¶ 61,085, at P 45 (citing Order No. 670 at P 50).

27 Order No. 670 at PP 52-53.

entity must have intended to affect, or have acted recklessly to affect, a jurisdictional transaction.'"[28]

36. The Commission further explained in Order No. 670 that "any entity may be subject to [Part 1c] if its fraudulent or manipulative conduct is 'in connection with' a purchase or sale of . . . electric energy . . . or transmission service that is subject to the Commission's jurisdiction."[29] The Commission "views the 'in connection with' element in the energy context as encompassing situations in which there is a nexus between the fraudulent conduct of an entity and a jurisdictional transaction."[30] "[I]n committing fraud, the entity must have intended to affect, or have acted recklessly to affect, a jurisdictional transaction."[31] The Commission clarified that "any entity engaging in a non-jurisdictional transaction through a Commission-regulated RTO/ISO market, that acts with intent or with recklessness to affect the single price auction clearing price (which sets the price of both non-jurisdictional and jurisdictional transactions), would be engaging in fraudulent conduct with a jurisdictional transaction and, therefore, would be in violation of [Part 1c.]"[32]

37. The Commission also explained that "where a firm uses some combination of market power and trading activity, against economic interest in one sector, in order to

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28 Amaranth, 120 FERC ¶ 61,085, at P 50 (citing Order No. 670 at P 22).

29 Order No. 670 at P 21.

30 Id. at P 22; see also Amaranth, 120 FERC ¶ 61,085, at P 110; Amaranth, 121 FERC ¶ 61,224, at PP 34-43 (Congress intended to cover a wide range or conduct with the prohibition against market manipulation).

31 Order No. 670 at P 22.

32 Id.

benefit its position in a related financial instrument by artificially moving the price, the firm likely crosses the line into the realm of manipulation."[33]

38. Following the promulgation of Part 1c of the Commission regulations, the Commission, in an effort to avoid regulatory uncertainty while assuring that customers are properly safeguarded from acts of market manipulation, rescinded prior Market Behavior Rule 2.[34] The Commission, however, also made clear in Order No. 670 that activities such as wash trades, transactions predicated on false information, creating and relieving artificial congestion, and collusion for the purpose of market manipulation that were prohibited under Market Behavior Rule 2 are examples of deceptive devices or contrivances and continue to be prohibited under Part 1c of the Commission's regulations.[35]

39. In Order No. 670, the Commission also made clear that parties could bring complaints directly under Part 1c of its regulations. The Commission explained that Congress provided the Commission "anti-manipulation authority that is independent of other provisions of the NGA and FPA, including NGA section 5 and FPA section 206."[36] Accordingly, the Commission rejected a "suggestion that complaints alleging manipulation necessarily would rely on NGA section 5 or FPA section 206."[37] However, the Commission rejected requests for special procedures for such complaints as

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33 Amaranth, 120 FERC ¶ 61,085, at P 58.

34 Investigation of Terms and Conditions of Public Utility Market-Based Rate Authorizations, 114 FERC ¶ 61,165 (2006).

35 Order No. 670 at P 59.

36 Id. at P 70.

37 Id.

unnecessary, explaining that complaints alleging manipulation should be filed following the procedures already set forth in Rule 206 of the Rules of Practice and Procedure.[38] In Order No. 670, the Commission also declined to "urge parties first to bring concerns and potential complaints to the Hotline," reasoning that "[a]ggrieved entities should be free to choose the approach best suited to their circumstances."[39]

IV. RESPONDENTS, ACTING INDIVIDUALLY AND/OR TOGETHER, VIOLATED THE COMMISSION'S PROHIBITION OF ELECTRIC ENERGY MARKET MANIPULATION.

40. As detailed in this section, the Tower Companies have engaged in conduct that violates the Commission's prohibition of electric energy market manipulation. The Fund Companies contravened the Commission's regulations by (i) using or employing a device, scheme or artifice to defraud the PJM market participants and manipulate the market for their benefit, and (ii) engaging in acts, practices, or courses of business that operated as a fraud or deceit upon PJM market participants. The Tower Companies violated the anti-manipulation regulations in each of the following ways (all described more fully below).

41. First, the Tower Companies colluded to purchase offsetting FTR positions in different affiliates, such that the default of Power Edge, which must be paid by the PJM members, was greater than it otherwise would have been, while one or more other affiliates received unjust profits.

42. Second, BJ Energy submitted increment and decrement bids in the day-ahead energy market, intentionally increasing congestion such that BJ Energy received

[38] Id. at P 70 (citing 18 C.F.R. § 385.206).

[39] Order No. 670 at P 73 (citing 18 C.F.R. § 1b.21).

more for its FTRs, while causing Power Edge to owe more for its counterflow FTRs, thereby unjustly enriching BJ Energy while exacerbating Power Edge's default, which must be paid by other PJM members.

43. Third, on information and belief, Power Edge may have fraudulently distributed funds to its investors and/or shareholders, reducing the cash available to pay its counterflow FTR obligations, causing defaults which PJM members are now forced to pay.

44. Fourth, Power Edge withheld payment on its counterflow FTR obligations notwithstanding its holding funds from which it could pay, thereby fraudulently creating greater obligations for PJM members to cover in connection with Power Edge's default.

A. The Fund Companies Colluded To Purchase Offsetting FTR Positions That Manipulated The Market.

45. The Fund Companies manipulated the market through their coordinated purchases of positions in FTRs in different affiliates. By acting in a coordinated manner to hold hedged positions through different affiliates, the Fund Companies could reap the benefits in one affiliate, BJ Energy, while another affiliate, Power Edge, defaulted on its obligations and effectively transferred its obligations to the market participants as a whole. Had the positions all been in the same company, the Power Edge default on its counterflow FTR position in part would have been hedged by the profits on the offsetting FTR positions, reducing the harm to PJM members.

46. Power Edge and BJ Energy are both managed by TRC and the same trader made the trades and bid in the FTR auctions for both companies. Power Edge and BJ Energy also may have substantially the same investors.[40]

47. In the annual FTR auction for the 2007/2008 planning year, Power Edge purchased 5,037.5 MW of counterflow FTRs at a negative cost of $55.1 million, i.e. Power Edge was to be paid $55.1 million (over twelve months) for purchasing the counterflow FTRs. In each of the 12 months of the planning year, Power Edge then must pay the costs of congestion on these FTR paths.

48. Power Edge further purchased bilaterally 8,931.7 MW of counterflow FTRs from Exel Power Sources LLC ("Exel"), which had purchased them at a negative cost of $96.8 million in the annual auction. As a result of this purchase, Power Edge would be paid by PJM $96.8 million over 12 months, while being obligated to pay the costs of congestion on these FTR paths.[41] Power Edge also purchased some prevailing flow FTRs during the 2007/2008 annual auction and monthly auctions for June, July, and September 2007, for a total of 5,602.6 MW of prevailing flow FTRs.

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40 As noted, the Tower Companies have not revealed their investors and discovery will be necessary to determine these facts. The facts described above give rise to an inference that common investors may be involved.

41 Power Edge also purchased additional counterflow FTRs in monthly FTR auctions for June and July. Power Edge, therefore, holds a total of 13,969.2 MW of counterflow FTRs purchased through the annual auctions and 634 MW of counterflow FTRs purchased for June and July 2007 in monthly auctions.

49. Based on the expected values of the FTRs, and their clearing prices in the auction, overall Power Edge holds an overwhelmingly counterflow FTR position, as the chart below shows.[42]

Auctions	Power Edge FTR Purchases			
	Counterflow FTR MWs	**Counterflow FTR Costs[43]**	**Prevailing Flow FTR MWs**	**Prevailing Flow FTR Cost[44]**
2007/2008 Annual Auction	5,037.5	$(55,110,490)	3,628.1	$6,997,132
Bilateral Transaction with Exel	8,931.7	$(96,817,744)		
June 2007 Auction	619	$(441,931)	1,777.6	$1,026,891
July 2007 Auction	15	$(2,494)	81.4	$35,927
September 2007 Auction			115.5	$190,976
Total	14,603	$(152,372,659)	5,602.6	$8,250,926

50. Following Power Edge's acquistions of primarily counterflow FTRs, its affiliate, BJ Energy, purchased FTRs in monthly auctions commencing with the auction for August 2007. Most of BJ Energy's FTR purchases were prevailing flow FTRs, and were for all months from September through May of the current planning year. BJ

42 Affidavit of Andrew L. Ott on behalf of PJM Interconnection, L.L.C. ("Ott Affidavit") ¶¶ 5-6. The Ott Affidavit is included as Attachment A to this Complaint. The above figures do not include subsequent limited FTR sales and therefore PowerEdge's actual holdings for any particular month may vary somewhat from the above.

43 These amounts are amounts paid to Power Edge (over 12 months) for acquiring and holding the counterflow FTRs, in return for Power Edge's obligations to pay the costs of congestion on the counterflow FTR paths.

44 These are amounts paid by Power Edge for the FTR positions, in return for payments Power Edge receives when there is congestion on the FTR paths.

Energy purchased the following quantities of prevailing flow FTRs in August 2007 through February 2008 auctions.[45]

Auctions	BJ Energy Purchased	
	Prevailing Flow FTR MWs	Prevailing Flow FTR Cost
August 2007 Auction	143	$94,770
October 2007 Auction	225.3	$59,794
November 2007 Auction	306.5	$929,184
December 2007 Auction	503.7	$272,327
January 2008 Auction	317.8	$176,587
February 2008 Auction	202.2	$102,263
Total	1,698.5	$1,634,926

51. The year to date profit positions of the Fund Companies for their FTR holdings is estimated to be as reflected in the chart below.[46]

Participant	FTR June 1, 2007 – February 29, 2008
Accord Energy	-$11,455
BJ Energy	$10,458,440[47]
Franklin Energy	$4,962,143
Ocean Power	$4,374,215
Power Edge (FTRs acquired from Exel)	-$31,353,690
Power Edge (FTRs purchased through auctions)	-$29,722,114

45 Ott Affidavit ¶ 7.

46 Ott Affidavit ¶ 9.

47 BJ Energy is required to forfeit approximately $2.4 of this amount pursuant to section 5.2.1(b) of the Appendix to Attachment K of the PJM Tariff. See note 51, infra.

Additional profits and losses will accrue on the Tower Companies' FTR positions over the remaining months of the planning period (i.e., through May 2008), as the companies hold FTRs for all remaining months.[48]

52. The same trader was identified to PJM as the authorized trader for Accord, BJ Energy, Ocean Power, and Power Edge in the FTR auctions.

53. Based on PJM's analysis, approximately 50% of the FTRs purchased by BJ Energy during the monthly auctions sank in locations known to provide offset to Power Edge's poor performing counterflow FTRs.[49] Further investigations and analysis may demonstrate that other FTRs held by BJ Energy and the other Fund Companies also may have provided additional offset to Power Edge's position.

54. Had BJ Energy's offsetting FTRs been held by Power Edge, they would have directly offset Power Edge's counterflow position, thereby reducing Power Edge's defaults. It appears that the Fund Companies were trying to hedge against the Power Edge counterflow position, by having an affiliate, BJ Energy, which likely has the same or similar investors, taking the hedge position. By having BJ Energy, rather than Power Edge, take these positions, the Tower Companies and these investors could profit from the BJ Energy positions and retain those profits, while Power Edge defaults remain, with the PJM members having to pay for them.

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48 The Fund Companies also had charges and revenues in other non-FTR markets. The amounts listed in the above chart do not reflect the non-FTR activity.

49 Ott Affidavit ¶¶ 10-11. Prevailing flow and counterflow FTRs do not have to have precisely equal and opposite paths to offset each other, or to act as a hedge against each other. A prevailing flow FTR that sinks at the same or nearby source point of a counterflow FTR may act as a hedge against the counterflow position. Similarly, a prevailing flow FTR on a path known to have congestion characteristics opposite to the counterflow FTR also could act as a hedge.

55. Upon information and belief, the Fund Companies undertook their positions in separate affiliates at a time when Power Edge was experiencing financial difficulty and knew it may default. Because the same trader acted on behalf of Power Edge and BJ Energy, this trader acted knowingly to benefit Power Edge's affiliate, BJ Energy, instead of benefiting Power Edge and reducing the default PJM members have to cover. If Power Edge and BJ Energy had not acted in such a coordinated manner, and Power Edge had held the hedge position rather than BJ Energy, then Power Edge's ultimate default would have been less. This would have resulted in the PJM members having to pay less to cover Power Edge's default.

56. Absent the Power Edge default and the manipulative behavior, these trades, taken together, would be irrational. The trader for these companies would be knowingly hurting Power Edge, on whose behalf he also traded, every time a BJ Energy trade was profitable. Absent a default, there is no rational reason for the trader to hurt Power Edge and its investors in this manner. However, to the extent the investors in Power Edge and BJ Energy were similar, it would be profitable to manipulatively place the profitable hedge position in BJ Energy rather than Power Edge, if the expectation was that the defaults of Power Edge would be avoided and "insured" without cost by the larger PJM membership. In this manner, the investors could retain the profits, instead of just reducing Power Edge's substantial defaults.

57. Accordingly, the Fund Companies violated the Commission's prohibition of market manipulation. The Fund Companies knowingly or recklessly used a "device, scheme or artifice" to defraud. The Fund Companies' actions were a "course of business that operates or would operate as a fraud or deceit upon" PJM and the PJM members by producing gains for BJ Energy that it will realize, while continuing losses for Power Edge

that the other PJM members must cover. The fact that there was both a common manager and common trader for both Power Edge and BJ Energy indicates these companies knowingly coordinated their actions to defraud PJM and the PJM members.

B. The Fund Companies' Submission Of Increment And Decrement Bids Artificially Created Congestion In The Day-Ahead Energy Market Thereby Enhancing Their FTR Profits, While Worsening Power Edge's FTR Default.

58. The Fund Companies used virtual bidding in the day-ahead energy market to enhance the profits of one or more affiliates' FTR positions, while worsening Power Edge's obligations on its counterflow FTR position, thereby increasing the default the PJM members have to cover. Further, by knowingly and actively increasing congestion in the day-ahead energy market for their own FTR financial gain, the Fund Companies affected the financial positions of other third-party FTR holders, with the resulting FTR settlements "no longer set solely by the legitimate forces of supply and demand."[50] Furthermore, the Fund Companies' virtual bidding distorted LMPs in the day-ahead energy market resulting in higher prices for energy in several PJM load zones.

59. Based on a sample of ten days during December and January, PJM has observed that BJ Energy submitted decrement bids in the day-ahead energy market at the Atlantic node. These virtual bids resulted in increased congestion on the Atlantic-Larrabee circuit, thereby increasing the payments to BJ Energy for FTRs it held that benefited by increased congestion on that circuit.[51] At the same time, the increased

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[50] Amaranth, 120 FERC ¶ 61,085, at P 45.

[51] As explained in Part II.B.3, infra, section 5.2.1 of the Appendix to Attachment K of the PJM Tariff anticipates that FTR holders might inappropriately enter virtual trades to affect the value of their FTRs, and requires such FTR holders to forfeit profits on the affected FTRs. Accordingly, BJ Energy, in subsequent settlement (Continued. . .)

congestion created by BJ Energy's virtual bids degraded the value of Power Edge's counterflow FTR position on the same path and thereby inflated the amount of its default, which the PJM members will have to cover.

60. BJ Energy's manipulative virtual bidding behavior occurred during December 2007 and January 2008, ending on or about January 25, 2008.[52] Based on an evaluation of BJ Energy's entire FTR portfolio, during the ten-day sample period, the value of BJ Energy's portfolio increased by $183,000, while Power Edge's FTR portfolio decreased by $480,253.[53] As shown in the chart below, BJ Energy's manipulative virtual bidding conduct, based on the ten-day sample, therefore likely produced a profit increase of over half a million dollars per month on BJ Energy's FTRs, while simultaneously producing an additional loss on Power Edge's counterflow FTRs of approximately $1.5 million per month, which will have to be covered by the PJM members. Likewise, other holders of counterflow FTRs were adversely affected by BJ Energy's virtual bidding. As a result of BJ Energy's impermissible virtual bids, based on the ten-day sample, other holders of counterflow FTRs lost over $1.8 million per month.[54]

(. . . continued)
of its bills, forfeited $1.3 million of December 2007 FTR revenues and $1.1 million of January 2008 FTR revenues. BJ Energy apparently was not aware of this rule, as its behavior was obviously undertaken to manipulate the energy market LMPs in order to benefit its FTR holdings.

52 It appears that the conduct ended when PJM informed the Tower Companies that the PJM Market Monitoring Unit had detected it.

53 Ott Affidavit ¶13.

54 Ott Affidavit ¶¶ 14-15. BJ Energy's virtual bids, of course, benefitted other holders of prevailing flow FTRs like BJ Energy held. Notably, this included two other affiliated Fund Companies, Franklin Power and Ocean Power.

	Affect of BJ Energy Increment and Decrement Bids	
	Over 10 Day Sample Period	**Per Month (based on a 31 day month)**
Increase in BJ Energy FTR Portfolio Value	$183,000	$567,300
Decrease in Power Edge FTR Portfolio Value	($480,253)	($1,488,784)
Decreases in Value to FTR Holders' Portfolios that Experienced loss	($603,500)	($1,870,850)

61. In addition to the effect on FTR portfolios, BJ Energy's manipulative virtual bidding for its own gain distorted LMPs in the day-ahead energy market. Based on a ten-day sample, PJM determined that the BJ Energy virtual bids increased LMPs significantly in the following four zones:

Zone	Average Increase in LMP due to BJ Energy Virtual Bidding (per MWh)
Jersey Central Power and Light Company	$1.17
Pennsylvania Electric Company	$0.44
Public Service Electric and Gas Company	$0.45
Rockland Electric Company	$0.61

Ott Affidavit ¶ 16.[55]

62. For the ten-day sample period, the zonal price changes in the day-ahead energy market in the four zones that experienced the largest impact – JCPL, PENELEC, PSEG, and RECO – produced increased payments for energy of $1,363,600 ($136,360

55 In some other zones, distorted LMPs reduced prices and correspondingly produced distortedly lower prices to generators in those zones.

per day).[56] Based on the sample, this equates to nearly $4 million per month in increased energy charges in the day-ahead energy market in these zones.

63. BJ Energy's conduct creating congestion for the purpose of enhancing its FTR position was a "device, scheme or artifice" to defraud PJM and the PJM members and constitutes a "course of business that operates or would operate as a fraud or deceit upon" PJM and the PJM members. BJ Energy's actions, through the same trader as its affiliate Power Edge, worsened the amount of Power Edge's defaults that PJM members have to cover. BJ Energy knew at the time it made the virtual bids that Power Edge would default on any further obligations and so could trade in a manner that benefited affiliates and harmed Power Edge.[57] Moreover, BJ Energy's behavior increased certain LMPs, requiring many customers to pay more for day-ahead energy than they would have had BJ Energy not submitted its manipulative virtual bids.

64. BJ Energy's manipulative behavior is explicitly the type of conduct the Commission intended its anti-manipulation rule to cover. In Order No. 670, the Commission emphasized that section 1c.2 of the Commission's regulations is intended to prohibit parties from knowingly or recklessly "creating and relieving artificial congestion, and collusion for the purpose of market manipulation."[58] BJ Energy

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[56] Ott Affidavit ¶ 17. On a per day basis, the impact on each of the 4 zones is $63,072 from the JCPL zone, $21,545 for the Penelec zone, $49,415 for the PSEG zone, and $2,328 for the RECO zone.

[57] The above facts give rise to the very strong inference that the investors in Power Edge and BJ Energy were substantially the same. Otherwise, TRC and the trader would have been violating their fiduciary duties to Power Edge's investors every time they submtited a virtual bid designed to profit BJ Energy and, by definition, harm the investors in Power Edge, which held opposite positions.

[58] Order No. 670 at P 59.

knowingly created congestion to benefit its FTR position, while acting in concert with its affiliate whose FTR position was worsened, at the expense of other market participants.

65. Accordingly, the Commission should find that BJ Energy violated the prohibition of market manipulation though its virtual bidding and order BJ Energy to disgorge its unjust profits and refund them to PJM and affected market participants. The Commission also should investigate all of BJ Energy and the other affiliates' trading to determine whether there was any other manipulative conduct.

C. Power Edge May Have Fraudulently Distributed Funds, Avoiding Its Payment Obligations.

66. Power Edge also appears to have fraudulently distributed funds to investors or shareholders that could have been used to pay its obligations on its counterflow FTRs. Upon information and belief, Power Edge was initially capitalized with over $18 million. However, upon information and belief, Power Edge distributed millions of dollars to its investors before it defaulted, even though at the time Power Edge had no earnings and had only experienced, or expected to experience, near-term losses in the PJM market.

67. As discussed, counterflow FTRs are expected to produce losses throughout the summer months. For the month of June 2007, Power Edge accrued a total amount owing to PJM of $5.8 million. In July and August 2007, losses on Power Edge's FTR positions were $7.1 million and $4.2 million, respectively. In September 2007, Power Edge's losses were $1.4 million. Only in October 2007 did Power Edge have earnings on its FTR positions, and the earnings were only $2.6 million.

68. Notwithstanding its expected financial obligations to PJM, on information and belief, Power Edge nonetheless distributed millions of dollars to investors. On May

31, 2007, at Power Edge's request, PJM returned $7 million of collateral to Power Edge that was not then required by PJM's credit rules. Yet, several weeks later, when it came time to pay its very first bills, Power Edge represented to PJM that it was short on capital and had to use collateral to pay its bills, otherwise it would be unable to make its payments. Apparently, Power Edge had distributed all or a substantial part of the $7 million which PJM had returned, and this distribution, and continuing losses, caused Power Edge's capitalization to become extremely thin such that it could not pay its bills. Had Power Edge not depleted its cash assets to its investors, Power Edge would have had additional assets to cover its ultimate defaults. There was no apparent legitimate basis for distributions to investors when Power Edge had no earnings and had reason to believe it would continue to incur financial obligations to PJM in the immediate future.

69. Power Edge's actions and course of business in failing to maintain available funds to pay its bills, including the timing and amounts of apparent distributions, operate as a fraud or deceit upon PJM and the PJM members. Power Edge's apparent actions resulted in Power Edge avoiding obligations it could have met, at least to a partial extent, and instead shifting these obligations to the PJM members through an intentional default. Power Edge's apparent actions in distributing funds appear to have been for the purpose of avoiding its payment obligations and therefore, impairing, obstructing or defeating Power Edge's ability to meet its obligations to PJM and the PJM members.

D. Power Edge Intentionally Did Not Pay Its Bills When It Still Had Funds.

70. When Power Edge defaulted, upon information and belief, Power Edge still had cash on hand which it could have used to pay its bills. In November 2007, PJM

disbursed $2.6 million to Power Edge for its October market activity. Nonetheless, Power Edge refused to pay its very next bill from PJM for November activity of only $2.3 million. Thus, Power Edge intentionally engaged in transactions in the PJM market and then intentionally failed to pay its obligations to PJM and the PJM members, despite having the financial wherewithal, in whole or in part, to do so.

71. There is no basis for engaging in market transactions and refusing to pay their costs, when funds are available to do so. Power Edge's intentional failure to pay PJM, when Power Edge did not dispute the bill and had funds to pay, constitutes an artifice and a course of business that operate as a fraud or deceit upon PJM and its members.

V. RELIEF REQUESTED.

72. PJM respectfully requests the Commission to:

1. Find that the Fund Companies manipulated the FTR and day-ahead energy markets.

2. Investigate the conduct of the Tower Companies to determine all violations of the rules prohibiting market manipulation.

3. Direct the Fund Companies to disgorge their unjust revenues and profits and refund them to PJM and to affected PJM members.

4. Prohibit trading by all of the Tower Companies in the PJM markets.

5. Impose civil penalties for the manipulative behavior of the Fund Companies.

6. Initiate an expedited public hearing, with discovery, to address the issues raised in this Complaint.

7. Grant such other and further relief as the Commission deems appropriate to address the market manipulation of the Fund Companies.

VI. RULE 206 REQUIREMENTS.

73. Action or Inaction Alleged to Violate Statutory Standards or Regulatory Requirements (Rule 206(b)(1)) — The violation is stated above in Part IV.

74. How Action or Inaction Violates Applicable Statutory Standards or Regulatory Requirements (Rule 206(b)(2)) — The violation of statutory and regulatory requirements are described in Part IV.

75. Issues Presented as They Relate to or Affect the Complainant (Rules 206(b)(3)) — The issues presented are set forth in Part IV.

76. Good Faith Effort to Quantify the Financial Impact or Burden Created for Complainant (Rule 206(b)(4) — The financial impacts are described in Part IV and are expected to exceed $20 million.

77. Practical, Operational, or other Nonfinancial Impacts on Complainant (Rule 206(b)(5)) — The actions of Respondents, if left unpunished, will injure market participants' faith in PJM's markets. Prompt action by the Commission addressing the manipulative conduct will help to restore faith in PJM's markets.

78. Related Proceedings (Rule 206(b)(6)) — In Docket No. ER08-455, PJM has sought Operating Agreement changes related to counterflow FTR defaults like that of the Power Edge defaults. See note 1, supra.

79. Specific Relief Requested (Rule 206(b)(7)) — The specific relief requested is set forth in Part V of the Complaint.

80. Documents that Support the Complaint (Rule 206(b)(8)) — The affidavit of Andrew L. Ott is attached to this Complaint. Other documents supporting the Complaint are in the possession of Respondents and must be obtained through discovery.

81. Dispute Resolution (Rule 206(b)(9)) — PJM has attempted, unsuccessfully, to resolve this dispute informally through telephone conferences and meetings with representatives of Respondents. Based on these discussions, it does not appear that a settled resolution is achievable.

82. Form of Notice (Rule 206(b)(10)) — PJM has included a Form of Notice suitable for publication in the Federal Register.

83. Service on Respondent (Rule 206(c)) — PJM is serving a copy of this Complaint, simultaneously with filing at the Commission, by email and first-class mail on Respondents as follows:

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Mark Gorton
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377 Broadway, 11th Floor
New York, NY 10013

PJM also has provided a copy of the Complaint to all state commissions in the PJM region, and all PJM members.

VII. COMMUNICATIONS.

84. Correspondence and communications with respect to this filing should be sent to, and PJM requests the Secretary to include on the official service list, the following:

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VIII. CONCLUSION.

85. For the reasons stated above, the Commission should grant the Complaint and issue an order granting the relief requested above.

Respectfully submitted,

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March 7, 2008

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ATTACHMENT A

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C. Complainant,	)	
	)	
v.	)	Docket No. EL08-___-000
	)	
Accord Energy LLC	)	
BJ Energy LLC	)	
Franklin Power LLC	)	
GLE Trading LLC	)	
Ocean Power LLC	)	
Pillar Fund LLC	)	
Power Edge LLC	)	
Tower Research Capital LLC	)	
Tower Research Capital Investments LLC Respondents.	)	

AFFIDAVIT OF ANDREW L. OTT
ON BEHALF OF PJM INTERCONNECTION, L.L.C.

Andrew L. Ott, being duly sworn, deposes and says as follows:

1. My name is Andrew L. Ott, and my business address is PJM Interconnection, L.L.C., 955 Jefferson Avenue, Valley Forge Corporate Center, Norristown, Pennsylvania 19403-2497. I am employed by PJM as Vice President of the Markets Division. In that capacity, I am responsible for the management of the PJM Market Operations and Market Settlements. I have been employed in PJM's Market Services Division since October, 1996. In that time period, I have been responsible for implementation of the current PJM locational marginal pricing ("LMP") system, the PJM financial transmission rights ("FTR") auction, and the PJM day-ahead energy market. Prior to joining PJM, I worked extensively in developing electricity market models and

power system analysis applications. I hold a Bachelor of Science degree in Electrical Engineering from Pennsylvania State University and a Master of Science degree in Applied Statistics from Villanova University.

2. My affidavit is submitted in support of PJM's Complaint against Accord Energy LLC ("Accord"), BJ Energy LLC ("BJ Energy"), Franklin Power LLC ("Franklin Power"), GLE Trading LLC, ("GLE Trading"), Ocean Power LLC ("Ocean Power"), Pillar Fund LLC ("Pillar"), Power Edge LLC ("Power Edge") (collectively "Fund Companies"), and Tower Research Capital LLC ("TRC"), and Tower Research Capital Investments LLC ("TRCI") (collectively "Tower Companies" or "Respondents") regarding their manipulation of the PJM market.

I. RESPONDENTS FTR POSITIONS

3. I have analyzed the FTR positions of the Tower Companies during the current planning year (June 2007 through May 2008), and in particular BJ Energy and Power Edge.

4. The Fund Companies have participated in the annual FTR auction for the 2007/2008 planning year and various monthly FTR auctions during the planning year. Power Edge also acquired FTRs through a bilateral transaction. The Fund Companies hold various amounts of both prevailing flow FTRs and counterflow FTRs.

A. Power Edge FTR Position

5. Power Edge purchased, through the FTR auctions and its bilateral purchase, a total of 14,603 MW of counterflow FTRs and 5,602.6 MW of prevailing flow FTRs. These counterflow FTRs consist of: (i) 5,037.5 MW that Power Edge purchased in the annual FTR auction for the 2007/2008 planning year; (ii) 619 MW purchased in the June 2007 auction; (iii) 15 MW purchased in the July 2007 auction; and (iv) 8,931.7 MW

that Power Edge purchased bilaterally from Exel Power Sources LLC ("Exel"). Power Edge purchased prevailing flow FTRs consist of: (i) 3,628.1 MW purchased in the 2007/2008 annual auction; and (ii) 5,602.6 MW purchased during the June 2007, July 2007, and September 2007 monthly FTR auctions.

6. The following chart summarizes Power Edge's FTR positions and the associated costs of the FTR purchases during the auctions. The counterflow FTR costs are negative meaning that Power Edge will be paid that amount in approximately equal amounts each month during the planning year, while the prevailing FTR costs are positive meaning that Power Edge will pay those amounts in approximately equal amounts each month during the planning year.

Auctions	**Power Edge FTR Purchases**			
	Counterflow FTR MWs	**Counterflow FTR Costs[1]**	**Prevailing Flow FTR MWs**	**Prevailing Flow FTR Cost[2]**
2007/2008 Annual Auction	5,037.5	$(55,110,490)	3,628.1	$6,997,132
Bilateral Transaction with Exel	8,931.7	$(96,817,744)[3]		
June 2007 Auction	619	$(441,931)	1,777.6	$1,026,891
July 2007 Auction	15	$(2,494)	81.4	$35,927
September 2007 Auction			115.5	$190,976
Total	14,603	$(152,372,659)	5,602.6	$8,250,926

---

1 These amounts are amounts paid to Power Edge (over 12 months) for acquiring and holding the counterflow FTRs, in return for Power Edge's obligations to pay the costs of congestion on the counterflow FTR paths.

2 These are amounts paid by Power Edge for the FTR positions, in return for payments Power Edge receives when there is congestion on the FTR paths.

3 This is the amount that was to be paid to Exel as a result of its auction purchases, and now is paid to Power Edge as a result of its bilateral purchase from Exel.

B. Other Fund Companies FTRs

7. BJ Energy purchased FTRs in monthly auctions commencing with the August 2007 auction. BJ Energy purchased primarily prevailing flow FTRs, which were for all months from August through May of the current planning year with the exception of September. The following chart summarizes the amounts of and costs for the prevailing flow FTRs that BJ Energy purchased in the FTR auctions from August 2007 through February 2008.

Auctions	BJ Energy Purchased	
	Prevailing Flow FTR MWs	Prevailing Flow FTR Cost
August 2007 Auction	143	$94,770
October 2007 Auction	225.3	$59,794
November 2007 Auction	306.5	$929,184
December 2007 Auction	503.7	$272,327
January 2008 Auction	317.8	$176,587
February 2008 Auction	202.2	$102,263
Total	1698.5	$1,634,926

8. Appendix A to this Affidavit includes a summary chart, summarizing the purchased FTRs for Accord, Franklin Power, and Ocean Power, in addition to BJ Energy and Power Edge.

9. In analyzing the planning year to date, I determined the year to date profit position for the FTR positions for each of the Fund Companies' FTR positions during the planning year. These values take into account the auction cost of the FTRs and the actual value of the position each month, which is the amount of congestion costs paid to the Fund Companies on its prevailing flow FTRs or the amount of congestion costs paid by the Fund Companies on its counterflow FTRs. The chart below summarizes these profit positions.

Participant	**FTR Profit June 1, 2007 – February 29, 2008**[4]
Accord Energy	-$11,455
BJ Energy	$10,458,440
Franklin Energy	$4,962,143
Ocean Power	$4,374,215
Power Edge (FTRs acquired from Exel)	-$31,353,690
Power Edge (FTRs purchased through auctions)	-$29,722,114

10. Prevailing flow and counterflow FTRs can act as hedges against each other in a market participant's portfolio. For prevailing flow and counterflow FTRs to offset each other, or for one to act as a hedge against the other, they do not need to have precisely equal and opposite paths. A prevailing flow FTR sinking at the same or nearby source point of a counterflow FTR may act as a hedge against the counterflow position, as could a prevailing flow FTR on a path known to have congestion characteristics opposite to the counterflow FTR.

11. Based on analysis of the paths for the FTRs held by BJ Energy and Power Edge, I have identified that at least approximately 50% of the FTRs purchased by BJ Energy sink at locations where Power Edge's counterflow FTRs source. These BJ Energy FTRs provide a financial offset to the Power Edge counterflow FTRs. Further analysis would need to be done to determine whether additional FTRs held by BJ Energy and the FTR positions of the other Fund Companies similarly sank in locations that financially offset the Power Edge counterflow FTRs.

---

4 The monthly and year-to-date profits are calculated using FTR cost estimates based on using $^1/_{12}$ of the value of the FTR from the annual auction. In PJM settlements, the FTR cost is billed based on number of days in the month divided by total days in a year. Therefore, these profit estimates may differ slightly from actual billing amounts.

II. BJ ENERGY INCREMENT AND DECREMENT BIDS

12. I reviewed and analyzed a ten-day sample of BJ Energy's increment offers and decrement bids in the day-ahead energy market. The ten days were during December 2007 and January 2008. The specific dates analyzed were December 25, 28, and 31, and January 6, 7, 8, 9, 15, 18, and 22. These dates were chosen as a representative sample of days where BJ Energy's virtual trading occurred at BJ Energy's FTR source and sink locations.

A. Effect on FTR Portfolios

13. During the ten sample days, along with most other days in December 2007 and January 2008, BJ Energy placed decrement bids at the Atlantic node. These bids had the effect of increasing congestion on the Atlantic-Larrabee circuit. BJ Energy held FTRs that benefitted from increased congestion on this circuit, and the increased congestion increased the payments to BJ Energy for these FTRs. Evaluating BJ Energy's entire FTR portfolio over the ten-day sample period shows that BJ Energy's FTR portfolio increased in value by $183,000 over the ten-day sample period because of its increment and decrement bids. The evaluation also showed that BJ Energy's increment and decrement bids during the ten-day sample period produced additional losses on Power Edge's counterflow FTRs of $480,253 during that time frame.

14. The evaluation of the ten-day sample, further showed that BJ Energy's virtual bids also decreased the value of the FTR portfolios of some other market participants. Over the ten-day sample period, the FTR portfolios of others that decreased in value experienced a total decrease of $603,500.

15. To estimate a monthly change in value due to BJ Energy's virtual bidding, I calculated an average daily value for the ten-day sample by dividing the ten-day amount

by ten and then multiplied that average daily value by 31. The results are summarized in the table below.

	Affect of BJ Energy Increment and Decrement Bids	
	Over 10 Day Sample Period	**Per Month (based on a 31 day month)**
Increase in BJ Energy FTR Portfolio Value	$183,000	$567,300
Decrease in Power Edge FTR Portfolio Value	($480,253)	($1,488,784)
Decreases in Value to FTR Holders' Portfolios that experienced losses	($603,500)	($1,870,850)

B. Effect on LMP

16. BJ Energy's virtual bidding also affected the LMP's in the day-ahead energy market. Evaluation of the day-ahead market with BJ Energy's virtual bidding removed for a ten-day sample shows that the impact of the virtual bids during those ten days increased the LMPs in several zones. The chart below summarizes the four zones that had the highest increases in LMP as a result of BJ Energy's virtual bids.

Zone	Average Increase in LMP due to BJ Energy Virtual Bidding per MWh
Jersey Central Power and Light Company	$1.17
Pennsylvania Electric Company	$0.44
Public Service Electric and Gas Company	$0.45
Rockland Electric Company	$0.61

17. I calculated the impact of the increased LMPs in the four zones that had the highest increase in LMP (JCPL, Penelec, PSEG, and RECO) for the ten-day sample period. The impact on energy purchasers in the day-ahead energy market for these four

zones is $136,360 per day for a total of $1,363,600 for the four zones for the ten-day sample period. The daily impact for the four zones is $63,072 for the JCPL zone, $49,415 for the PSEG zone, $21,545 for the Penelec zone, and $2,328 for the RECO zone. Because I have no reason to expect the effects in the ten-day sample to differ from the effects generally, these calculations show that the monthly impact on these zones is increased costs to energy purchasers of approximately $4.2 million per month.

Appendix A
Summary Fund Company Purchased FTRs

Fund Company	Auction	Purchased FTR MWs			Purchased FTR Cost		
		Counter Flow	Prevailing Flow	Total	Counter Flow	Prevailing Flow	Total
Accord	SEP 2007 Auction	25	30.3	55.3	($519)	$3,315	$2,796
	OCT 2007 Auction		64	64		$5,051	$5,051
	NOV 2007 Auction		21	21		$462	$462
	DEC 2007 Auction		0.3	0.3		$239	$239
	JAN 2008 Auction		10	10		$13,271	$13,271
	FEB 2008 Auction	15	10	25	$0	$271	$271
Accord Total		**40**	**135.6**	**175.6**	**($519)**	**$22,609**	**$22,090**
BJ Energy	AUG 2007 Auction	184	143	327	($921,417)	$94,770	($826,647)
	OCT 2007 Auction	251.2	225.3	476.5	($57,925)	$59,794	$1,869
	NOV 2007 Auction	24	306.5	330.5	($551)	$929,184	$928,633
	DEC 2007 Auction	50	503.7	553.7	($630)	$272,327	$271,697
	JAN 2008 Auction	20	317.8	337.8	($2,521)	$176,587	$174,066
	FEB 2008 Auction	50.4	202.2	252.6	($9,588)	$102,263	$92,675
BJ Energy Total		**579.6**	**1698.5**	**2278.1**	**($992,633)**	**$1,634,926**	**$642,293**
Franklin	07/08 Annual Auction	2294.7	406.3	2701	($3,193,834)	$127,903	($3,065,932)
	JUN 2007 Auction	2951	1001.2	3952.2	($133,689)	$201,125	$67,436
	JUL 2007 Auction	981.4	920.2	1901.6	($58,267)	$228,254	$169,987
	AUG 2007 Auction	3270	921.1	4191.1	($503,799)	$109,060	($394,739)
	SEP 2007 Auction	7839.2	1648.1	9487.3	($346,766)	$115,165	($231,602)
	OCT 2007 Auction	7972.3	1746.3	9718.6	($268,073)	$67,185	($200,888)
	NOV 2007 Auction	6623.2	2154.5	8777.7	($229,770)	$553,899	$324,129
	DEC 2007 Auction	210	868.9	1078.9	($39,038)	$476,487	$437,450
	JAN 2008 Auction	685.8	726.6	1412.4	($255,066)	$557,712	$302,646
	FEB 2008 Auction	2808.9	1394.2	4203.1	($122,714)	$664,411	$541,697
	MAR 2008 Auction	1133	313.1	1446.1	($45,573)	$242,314	$196,741
Franklin Total		**36769.5**	**12100.5**	**48870**	**($5,196,589)**	**$3,343,515**	**($1,853,074)**

		Purchased FTR MWs			Purchased FTR Cost		
Fund Company	**Auction**	**Counter Flow**	**Prevailing Flow**	**Total**	**Counter Flow**	**Prevailing Flow**	**Total**
Ocean Power	JUL 2007 Auction	416.6		416.6	($5,160,822)		($5,160,822)
	AUG 2007 Auction	431.4	301.7	733.1	($2,829,335)	$47,485	($2,781,849)
	SEP 2007 Auction	116.5	240	356.5	($1,800,560)	$220,090	($1,580,471)
	OCT 2007 Auction	218		218	($1,268,777)		($1,268,777)
	NOV 2007 Auction	321	635.3	956.3	($30,955)	$153,920	$122,966
	DEC 2007 Auction	135	299	434	($85,280)	$171,216	$85,936
	JAN 2008 Auction	142.8	754.4	897.2	($132,002)	$1,230,027	$1,098,025
	FEB 2008 Auction	118	256.2	374.2	($512,164)	$368,928	($143,236)
Ocean Power Total		**1899.3**	**2486.6**	**4385.9**	**($11,819,895)**	**$2,191,667**	**($9,628,228)**
Power Edge (FTRs acquired from Exel)	07/08 Annual Auction	8931.7		8931.7	($96,817,744)		($96,817,744)
	AUG 2007 Auction			0			$0
	SEP 2007 Auction			0			$0
	OCT 2007 Auction			0			$0
	NOV 2007 Auction			0			$0
	DEC 2007 Auction			0			$0
Power Edge (FTRs acquired from Exel) Total		**8931.7**		**8931.7**	**($96,817,744)**		**($96,817,744)**
Power Edge (purchased through auctions)	07/08 Annual Auction	5037.5	3628.1	8665.6	($55,110,490)	$6,997,132	($48,113,358)
	JUN 2007 Auction	619	1777.6	2396.6	($441,931)	$1,026,891	$584,959
	JUL 2007 Auction	15	81.4	96.4	($2,494)	$35,927	$33,433
	AUG 2007 Auction			0			$0
	SEP 2007 Auction		115.5	115.5		$190,976	$190,976
Power Edge (purchased through auction) Total		**5671.5**	**5602.6**	**11274.1**	**($55,554,916)**	**$8,250,926**	**($47,303,990)**

Norristown)
) ss
Pennsylvania)

AFFIDAVIT OF ANDREW L. OTT

Andrew L. Ott, being first duly sworn, deposes and says that he has read the foregoing "Affidavit of Andrew L. Ott on behalf of PJM Interconnection, L.L.C.," that he is familiar with the contents thereof, and that the matters and things set forth therein are true and correct to the best of his knowledge, information, and belief.

s/s Andrew L. Ott
Andrew L. Ott

Subscribed and sworn to before me this 7th day of March, 2008.

s/s Sandra L Ritchie
Notary Public

My Commission expires: Nov. 3, 2009

NOTARIAL SEAL
SANDRA L RITCHIE
Notary Public
LOWER PROVIDENCE TWP, MONTGOMERY COUNTY
My Commission Expires Nov 3, 2009

**FORM OF NOTICE
SUITABLE FOR PUBLICATION IN THE FEDERAL REGISTER**

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C.	)	
Complainant,	)	
	)	
v.	)	Docket No. EL08-___-000
	)	
Accord Energy LLC	)	
BJ Energy LLC	)	
Franklin Power LLC	)	
GLE Trading LLC	)	
Ocean Power LLC	)	
Pillar Fund LLC	)	
Power Edge LLC	)	
Tower Research Capital LLC	)	
Tower Research Capital Investments LLC	)	
Respondents.	)	

NOTICE OF COMPLAINT

(March __, 2008)

Take notice that on March 7, 2008, PJM Interconnection, L.L.C. ("PJM") filed a formal complaint against Accord Energy LLC, BJ Energy LLC, Franklin Power LLC, GLE Trading LLC, Ocean Power LLC, Pillar Fund LLC, Power Edge LLC, Tower Research Capital LLC, and Tower Research Capital Investments LLC pursuant to sections 206, 222, and 306 of the Federal Power Act, 16 U.S.C. §§ 824e, 824v, and 825e, and 18 C.F.R. § 385.206, alleging that the Respondents engaged in conduct and committed actions to manipulate the PJM market in violation of the Commission's prohibitions against market manipulation, and that Respondents should be required to disgorge unjust revenues and provide refunds, and be investigated for civil penalties.

PJM Interconnection, L.L.C. certifies that copies of the complaint were served on the contacts for Accord Energy LLC, BJ Energy LLC, Franklin Power LLC, GLE Trading LLC, Ocean Power LLC, Pillar Fund LLC, Power Edge LLC, Tower Research Capital LLC, and Tower Research Capital Investments LLC.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 C.F.R. §§ 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. The Respondent's answer and all interventions, or protests must be filed on or

before the comment date. The Respondent's answer, motions to intervene, and protests must be served on the Complainants.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at http://www.ferc.gov. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426.

This filing is accessible on-line at http://www.ferc.gov, using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, D.C. There is an "eSubscription" link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email FERCOnlineSupport@ferc.gov, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: 5:00 pm Eastern Time on (insert date).

Kimberly D. Bose
Secretary

EXHIBIT F

AO 440 (Rev. 03/08) Civil Summons (Page 2)

Proof of Service

I declare under penalty of perjury that I served the summons and complaint in this case on Tower Research Capital LLC by:

(1) personally delivering a copy of each to the individual at this place, ________________; or

(2) leaving a copy of each at the individual's dwelling or usual place of abode with ________________ who resides there and is of suitable age and discretion; or

(3) delivering a copy of each to an agent authorized by appointment or by law to receive it whose name is Delaware Secretary of State, accepted by Karen Charbonneau at 9:32 a.m.; or

(4) returning the summons unexecuted to the court clerk on ________________.

My fees are $________ for travel and $________ for services, for a total of ________________.

Date: 4/17/08

Amanda Jarman
Signature of Server

Amanda Jarman, Process Server
Printed name and title

15 E. North St, Dover, DE 19901
Address of Server

AO 440 (Rev. 03/08) Civil Summons (Page 1)

UNITED STATES DISTRICT COURT

For the District of Delaware

PJM INTERCONNECTION, LLC, directly and derivatively on behalf of Power Edge, LLC,	)	
Plaintiff,	)	
V.	)	**Civil Action No.:** 08-216
MARK GORTON; TOWER RESEARCH CAPITAL LLC; TOWER RESEARCH CAPITAL INVESTMENTS, LLC; ACCORD ENERGY, LLC; BJ ENERGY, LLC; FRANKLIN POWER, LLC; GLE TRADING, LLC; OCEAN POWER, LLC; PILLAR FUND, LLC; and POWER EDGE LLC,	)	
Defendants.	)	

Summons in a Civil Action

To: TOWER RESEARCH CAPITAL LLC
c/o the Delaware Secretary of State
CT CORPORATION SYSTEM
111 EIGHTH AVENUE
NEW YORK, NEW YORK, 10011

A lawsuit has been filed against you.

Within 20 days after service of this summons on you (not continuing the day you received it), you must serve on the plaintiff an answer to the attached complaint or a motion under Rule 12 of the Federal Rules of Civil Procedure. The answer or motion must be served on the plaintiff's attorney, whose name and address are:

Collins J. Seitz, Jr. (Bar No. 2237)
Max B. Walton (Bar No. 3876)
Connolly Bove Lodge & Hutz LLP
The Nemours Building
1007 North Orange Street
P.O. Box 2207
Wilmington, DE 19899

If you fail to do so, judgment by default will be entered against you for the relief demanded in the complaint. You also must file your answer or motion with the court.

PETER T. DALLEO

Name of clerk of court

Beth Dain

Deputy clerk's signature

DATE: 4/16/08

EXHIBIT G

AO 440 (Rev. 03/08) Civil Summons (Page 2)

Proof of Service

I declare under penalty of perjury that I served the summons and complaint in this case on Mark Gorton by:

(1) personally delivering a copy of each to the individual at this place, ______________________________

______________________________; or

(2) leaving a copy of each at the individual's dwelling or usual place of abode with ______________ who resides there and is of suitable age and discretion; or

(3) delivering a copy of each to an agent authorized by appointment or by law to receive it whose name is Delaware Secretary of State, accepted by Karen Charbonneau at 9:32 am.; or

(4) returning the summons unexecuted to the court clerk on ______________________________.

My fees are $________ for travel and $ _______ for services, for a total of ______________.

Date: 4/17/08

Amanda Jarman
Signature of Server

Amanda Jarman, Process Server
Printed name and title

15 E. North St, Dover, DE 19901
Address of Server

AO 440 (Rev. 03/08) Civil Summons (Page 1)

UNITED STATES DISTRICT COURT

For the District of Delaware

PJM INTERCONNECTION, LLC, directly and derivatively on behalf of Power Edge, LLC,	)	
Plaintiff,	)	
V.	)	**Civil Action No.:** 08-216
MARK GORTON; TOWER RESEARCH CAPITAL LLC; TOWER RESEARCH CAPITAL INVESTMENTS, LLC; ACCORD ENERGY, LLC; BJ ENERGY, LLC; FRANKLIN POWER, LLC; GLE TRADING, LLC; OCEAN POWER, LLC; PILLAR FUND, LLC; and POWER EDGE LLC,	)	
Defendants.	)	

Summons in a Civil Action

To: MARK GORTON
c/o The Delaware Secretary Of State
LIME GROUP
377 BROADWAY, 11TH FL.
NEW YORK, NY 10013

A lawsuit has been filed against you.

Within 20 days after service of this summons on you (not continuing the day you received it), you must serve on the plaintiff an answer to the attached complaint or a motion under Rule 12 of the Federal Rules of Civil Procedure. The answer or motion must be served on the plaintiff's attorney, whose name and address are:

Collins J. Seitz, Jr. (Bar No. 2237)
Max B. Walton (Bar No. 3876)
Connolly Bove Lodge & Hutz LLP
The Nemours Building
1007 North Orange Street
P.O. Box 2207
Wilmington, DE 19899

If you fail to do so, judgment by default will be entered against you for the relief demanded in the complaint. You also must file your answer or motion with the court.

PETER T. DALLEO
Name of clerk of court

DATE: 4/16/08

Betty [illegible]
Deputy clerk's signature

EXHIBIT H

Wachtell, Lipton, Rosen & Katz

MEMORANDUM

March 17, 2008

TO: Vincent P. Duane

FROM: Harold S. Novikoff
Philip Mindlin
Joshua A. Feltman
Jane VanLare

RE: Setoffs and Credit Risk of PJM in Member Bankruptcies

PJM Interconnection, L.L.C. ("PJM") has asked us to consider the potential impact of a PJM Member bankruptcy on PJM's practice of setting off amounts owing to PJM Members against the obligations of such Members to PJM. Part I of this memorandum considers the law of setoff generally. Part II of this memorandum considers the application of the law of setoff to PJM in light of PJM's structure, the structure of the energy markets which it administers and the broader backdrop of bankruptcy law. Finally, Part III suggests various ways in which the risks identified in Part II might be addressed.

Capitalized terms used in this memorandum and not otherwise defined have the meanings given to such terms in the Amended and Restated Operating Agreement of PJM (the "Operating Agreement").

I. Setoff

A. Overview

"Setoff" is a right arising under state law or under contract that "allows entities that owe each other money to apply their mutual debt against each other, thereby avoiding 'the absurdity of making A pay B when B owes A.'"[1] "A right of setoff is a remedy that has long been recognized and enforced in the commercial world."[2]

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[1] *In re Gordon Sel-Way, Inc.*, 270 F.3d 280, 290 (6th Cir. 2001) (quoting *Citizens Bank of Md.* v. *Strumpf*, 516 U.S. 16, 18 (1995)).
[2] 5 *Collier on Bankruptcy* ¶ 553.02 (15th ed. 2008).

Section 553 of the United States Bankruptcy Code (the "Code") preserves rights of setoff otherwise existing under applicable non-bankruptcy law with respect to entities in bankruptcy proceedings,[3] subject to certain conditions.[4] Merely satisfying the state-law requirements is insufficient to assert setoff in bankruptcy; the creditor must satisfy the *additional* requirements outlined in section 553.[5] Specifically, a creditor may assert a right of setoff under Section 553 if the following conditions are met: "(1) the creditor holds a 'claim' against the debtor that arose before the commencement of the case; (2) the creditor owes a 'debt' to the debtor that also arose before the commencement of the case; (3) the claim and debt are 'mutual;' and (4) the claim and debt are each valid and enforceable."[6]

Preservation of the right of setoff is important in bankruptcy because it has the effect of elevating the claims of the asserting party against the debtor to the status of secured claims. Indeed, Section 506(a) of the Code provides that a claim subject to setoff *is* a secured claim to the extent of the amount eligible for setoff.[7]

Consider the case of a debtor "D" that files for bankruptcy at a time when it owes creditor "C1" $100 in respect of purchases of tires from C1 but simultaneously is owed $50 by C1 for purchases from D of hubcaps. To the extent no right of setoff exists, C will be forced to pay the $50 owing to D and will have an unsecured claim against D for $100. If D is insolvent, this unsecured claim is worth less than $100 and will not be paid in full. Assuming, by way of example, that unsecured creditors of D are paid 20 cents on each dollar of claims against D, C1 will receive $20 for its claims, and thus C1's net outcome will be a payment to D of $30. To the extent a right of setoff *does* exist, C1 will not have to pay the $50 to D and will instead reduce the $100 debt owing by D by such amount, leaving it with an unsecured claim against D of $50. By hypothesis, this claim would receive $10 and C1's net outcome would be receipt of $10 rather than payment of $30. In effect, the right of setoff means that D's obligations to C1 are secured by a lien on the amounts owed by C1 to D – under the right conditions, the Code permits C1 to realize on that lien.[8]

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[3] 11 U.S.C. § 553 ("[The Code] does not affect the right of a creditor to offset a mutual debt owing by such creditor to the debtor..."). Section 553 does not create an independent right of setoff under the Bankruptcy Code. *In re Chateaugay Corp.*, 94 F.3d 772, 777 (2d Cir. 1996); *In re Bevill, Bresler & Schulman Asset Management Corp.*, 896 F.2d 54, 57 (3d Cir. 1990).

[4] There are additional restrictions applicable to transactions during the 90 day period prior to the bankruptcy filing. For example, other than in the case of certain specified financial contracts, a creditor that acquires a claim against the debtor from a third party in the 90 days prior to the bankruptcy petition and while the debtor was insolvent may not offset such claim against amounts owing to the debtor. Nor, subject to the same exception, may a creditor offset a debt owing to the debtor if such was incurred in the 90 days prior to bankruptcy, while the debtor was insolvent and for the purpose of obtaining as setoff right. We also note the "improvement in position" rule of setoffs in bankruptcy, which rescinds and disallows setoffs in the 90 days prior to a bankruptcy filing if the effect of such setoff is to reduce the non-setoff portion of the applicable creditor's claims against the debtor (*i.e.*, the creditor's net unsecured claim position) to an amount less than the creditor's exposure 90 days prior to the filing. In short, it is impermissible for a creditor to use setoff to improve its position in the 90 days prior to a debtor's bankruptcy (the rule is analogous to the "preference" rules discussed below).

[5] *See In re County of Orange*, 183 B.R. 609, 615 (Bankr. C.D. Cal. 1995).

[6] 5 *Collier on Bankruptcy* ¶ 553.03 (15th ed. 2008).

[7] *Id.*; 11 U.S.C. § 506.

[8] Section 362 of the Code provides for an "automatic stay" prohibiting, among other things, collection actions against the debtor, including the exercise of setoff rights to collect pre-petition claims, without bankruptcy court permission. Hence, even creditors with indisputably valid setoff rights are subject – generally – to timing/liquidity

Another way of viewing C1's recovery is that it received 60 cents on every dollar of claims: for $100 in claims it received $10 in cash and a $50 reduction in its own debts. Compare this outcome with that of C2, to whom D also owes $100 in respect of tire purchases but who did not purchase hubcaps from D. It receives $20 in cash for its $100 in claims, a recovery rate one third that of C1.

B. The Mutuality Requirement

Courts commonly deny setoff due to the absence of mutuality of claims as required by § 553(a).[9] While the Code does not define "mutuality," courts have developed a test for determining whether it exists. To be mutual the debts must be (i) between the same parties, standing (ii) in the same right and (iii) in the same capacity.[10]

The mutuality requirement is strictly construed "because setoffs run contrary to fundamental bankruptcy policies such as the equal treatment of creditors and the preservation of a reorganizing debtor's assets."[11] In other words, the Code generally works to assure C1 and C2 achieve similar outcomes. As seen above, setoff is a departure from this principle.

(1) <u>"Between the Same Parties"</u>

Eligibility for setoff requires that the obligations be between the same two parties, *i.e.* A owes B, and B owes A. A common situation in which a court will likely find mutuality to be lacking is a "triangular setoff."[12] In this situation A has a claim against B who has a claim against C, and A attempts to offset its debt to B against B's debt to C.[13] This situation frequently arises when a parent company seeks to offset its obligations to the debtor against the debtor's obligations to the parent's subsidiary or when a non-debtor seeks to offset its obligations to a

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risk because they will have to wait to actually exercise such rights. However, an exception to the automatic stay exists for certain types of counterparties with respect to certain types of "financial" contracts, including securities contracts, swaps, mortgage loan repurchase agreements, and, most importantly, commodity contracts (which may include contracts for the purchase and sale of electricity). In applicable cases, counterparties to debtors may, notwithstanding the bankruptcy filing, terminate and close out open commodity contracts, set off mutual liabilities with the debtor and seize and liquidate applicable collateral. Moreover, transactions prior to a bankruptcy filing under applicable "financial" contracts have a broad (but not total) immunity from post-filing challenge as fraudulent or otherwise avoidable. The ability of PJM to structure transactions with Members in a manner that would enable it to take advantage of these special provisions is substantially related to the contractual changes necessary to assure PJM's ability to employ setoffs in its dealings with bankrupt Members, as discussed throughout this memorandum.

[9] *See, e.g., In re Bevill, Bresler & Schulman Asset Management Corp.*, 896 F.2d at 57 (noting that the right of setoff under § 553 "depends on the existence of mutual debts and claims between creditor and debtor"); Beverly J. Hall, "Recent Developments in Bankruptcy Law: Preferences and Setoffs: Sections 547 and 553," 2 Bankr. Dev. J. 49, 76-77 (1985) ("The critical requirement for setoff is that the debts be mutual obligations.").

[10] *In re Westchester Structures, Inc.*, 181 B.R. 730, 739 (Bankr. S.D.N.Y. 1995); 5 *Collier on Bankruptcy* ¶ 553.03 (15th ed. 2008).

[11] *Newbery Corp.* v. *Fireman's Fund Ins. Co.*, 95 F.3d 1392, 1399 (9th Cir. 1996).

[12] *See, e.g., In re Hill Petroleum Co.*, 95 B.R. 404, 411 (Bankr. W.D. La. 1988).

[13] 5 *Collier on Bankruptcy* ¶ 553.03 (15th ed. 2008); *see also Depositors Trust Co. of Augusta* v. *Frati Enterprises*, 590 F.2d. 377, 379 (1st Cir. 1979); *In re Berger Steel Co.*, 327 F.2d 401, 408 (7th Cir. 1964); *In re Balducci Oil Co.*, 33 B.R. 847, 852-53 (Bankr. Colo. 1983).

debtor by the amount of the non-debtor's claim against the debtor's also-bankrupt subsidiary.[14] "It is a matter of well settled law... that debts involving parent and subsidiary business entities are not mutual for [s]ection 553 purposes."[15] Furthermore, "[a] 'control' relationship does not... necessarily make two entities a single entity for setoff purposes."[16]

To the extent enforceable under nonbankruptcy law, a triangular setoff may be permissible in bankruptcy "where there is a formal agreement between the debtor that the two entities may aggregate debts owed to and from the debtor."[17] The contractual provision must express the parties' intent to treat the applicable entities as one.[18] Thus, the exception is unlikely to extend to agreements that involve numerous parties without identical economic interests.[19]

(2) "In the Same Right" and "In the Same Capacity"

While courts sometimes use these requirements interchangeably, "in the same right" means that an obligation that is owned jointly with another party is generally not eligible for setoff.[20] The purpose of this requirement is to protect an innocent third party holder of a claim. For instance, Creditor A and Creditor B own a joint claim against Debtor D. Meanwhile, Creditor A owes a debt to Debtor D. Creditor A may wish to offset its obligations against D's obligation to both A and B. Allowing A to assert a setoff right, however, would harm Creditor's B's interest in the joint claim.

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[14] 5 *Collier on Bankruptcy* ¶ 553.03 (15th ed. 2008).

[15] *In re Sentinel Prods. Corp.*, 192 B.R. 41, 47 (Bankr. N.D.N.Y. 1996). We are informed that PJM permits affiliated companies of Members which execute sharing agreements to effectively engage in triangular setoffs in the ordinary course. Assuming PJM's setoff rights are enforced in bankruptcy generally, such arrangements may be upheld if properly documented (*e.g.*, to include cross-guarantees among the affiliated parties so that each has an obligation to PJM). We have not undertaken to examine the arrangements which PJM actually employs and express no view on their adequacy.

[16] *In re County of Orange*, 183 B.R. 609, 616 (Bankr. C.D. Cal. 1995).

[17] *In re Hill Petroleum Co.*, 95 B.R. 404, 411 (Bankr. W.D. La. 1988); 5 *Collier on Bankruptcy* ¶ 553.03 (15th ed. 2008) (referring to this as a "narrow" exception to the general rule that triangular setoff is not permitted).

[18] *See, e.g., In re Garden Ridge Corp.*, 338 B.R. 628, 634, 636-37 (Bankr. D.Del. 2006) ("The second exception [to prohibiting triangular setoff] is that an express agreement between the related entities may created [sic] mutuality for setoff purposes."); *In re Hill Petroleum Co.*, 95 B.R. 404, 411 (Bankr. W.D. La. 1988) ("The narrow exception to the rule against three party, 'triangular' setoffs, occurs where there is a formal agreement by the debtor that two entities may aggregate debts owed to and from the debtor."); *In re Balducci Oil Co., Inc.*, 33 B.R. 847, 853 (Bankr. Colo. 1983) ("The courts have found mutuality between three parties, as a matter of contract law, where there was an express contractual agreement clearly evincing the intent of the parties to treat the parent and subsidiary as one entity.").

[19] Triangular setoffs face hurdles other than mutuality in bankruptcy as well. First, they may be challenged as fraudulent transfers. A fraudulent transfer is essentially the transfer of an asset other than for reasonably equivalent value at a time when the transferor is insolvent, and such conveyances are subject to rescission. For example, if a debtor "D" has allowed PJM to offset PJM's debt to D against the obligation of D's affiliate "A" to PJM, then A and its creditors will benefit at the expense of D and its creditors, as D has received no consideration for relinquishing the right to payment from PJM. In such a case, the setoff may be undone and PJM compelled to pay D and accept the credit of A. Second, triangular setoffs may be challenged as unperfected – and thus avoidable in bankruptcy – liens on receivables, since the transaction is equivalent to D pledging to PJM its receivable from PJM in order to satisfy the obligation of A to PJM.

[20] *Id.*

The "capacity" requirement means that mutuality is lacking if the parties "stand in *different relationships* in the various transactions."[21] Thus, setoff has been disallowed where the creditor sought to setoff its own obligations against funds that he held in trust for another party.[22] "The distinction between the concept of 'capacity' and the requirement that the obligations be owed between the 'same parties' is that the latter refers to the identity of the parties whereas the former refers to their relationship to each other."[23]

C. Recoupment

When one of the requirements for setoff is lacking, a creditor may sometimes assert the defense of recoupment. This equitable right is similar to setoff in that it permits a creditor to offset its obligations against the debtor's claim. However, there are important differences. While setoff involves two obligations each of which is independently enforceable, recoupment is a defense that acts to reduce the amount of the other party's claim.[24] Thus, unlike setoff, recoupment does not require mutuality, and recoupment permits pre-petition (*i.e.*, arising prior to a bankruptcy filing) obligations to be effectively offset against post-petition obligations.[25] "The only real requirement regarding recoupment is that a sum can be reduced only by matters or claims arising out of the same transaction as the original sum."[26]

The range of events that may be said to arise out of the "same transaction" is subject to different definitions and applications by different courts. The Third Circuit Court of Appeals has adopted a relatively strict definition of "same transaction."[27] "A mere logical relationship is not enough... both debts must arise out of a single integrated transaction so that it would be inequitable for the debtor to enjoy the benefits of that transaction without also meeting its obligations."[28] There have been several cases in which creditors successfully asserted recoupment in situations where the debtor and creditor had a continuing relationship with periodic "netting" of liabilities.[29] However, these cases involved a simple two-party relationship.

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[21] *In re Westchester Structures, Inc.*, 181 B.R. 730, 739 (Bankr. S.D.N.Y. 1995) (emphasis in original).
[22] *In re Bevill, Bresler & Schulman Asset Management Corp.*, 896 F.2d at 57; *In re Texas Mortgage Services Corp.*, 761 F.2d 1068, 1075 (5th Cir. 1985); *Modern Settings, Inc.* v. *Prudential-Bache Securities, Inc.*, 936 F.2d 640, 648 (2d Cir. 1991) (no mutuality where the creditor's debt arose from its breach of a fiduciary duty to the debtor, even though the creditor was not a "technical trustee").
[23] 5 *Collier on Bankruptcy* ¶ 553.03 (15th ed. 2008).
[24] Natalie Regoli, "Setoff in Bankruptcy: A Practical Guide to 11 U.S.C. § 553," 38 Fall Tex. J. Bus. L. 1, 7-8 (2002).
[25] *In re Midwest Service and Supply Co.*, 44 B.R. 262, 265-66 (D.C. Utah 1983).
[26] *Id.* at 266 (citing *Waldschmidt* v. *CBS, Inc.*, 14 B.R. 309 (D.W.D. Tenn. 1981)). *See also In re Yonkers Hamilton Sanitarium Inc.*, 22 B.R. 427, 433 (Bankr. S.D.N.Y. 1982); *In re Mohawk Industries, Inc.*, 82 B.R. 174, 176 (Bankr. D. Mass. 1987).
[27] The third federal judicial circuit includes New Jersey, Delaware and Pennsylvania. Given PJM's market territory and the fact that the Operating Agreement is governed by Delaware law, it is likely that any setoff disputes that arise will be adjudicated in accordance with Third Circuit precedents. Regardless, the law on this point is not dramatically different in other jurisdictions.
[28] *In re Anes*, 195 F.3d 177, 182 (3d Cir. 1999) ("Use of this stricter standard for delineating the bounds of a transaction in the context of recoupment is in accord with the principle that this doctrine, as a non-statutory, equitable exception to the automatic stay, should be narrowly construed.").
[29] *In re R & C Petroleum, Inc.*, 247 B.R. 203 (Bankr. E.D. Tex. 2000); *In re B & L Oil Co.*, 782 F.2d 155 (10th Cir. 1986).

II. PJM and Setoff

A. PJM Setoff Practice in the Ordinary Course

Section 15.1.3 of the Operating Agreement, entitled "Payment of Bills", provides a contractual right of setoff to PJM in respect of amounts owing to its Members:

> With respect to any payment that the LLC is required to make to a member in connection with or arising under this Agreement, any service or rate schedule, or any tariff, the LLC shall have a right of setoff equal to any amount that the Member is required to pay the LLC in connection with or arising under or from this Agreement, any service or rate schedule, any tariff, or any services performed by the Office of Interconnection.

We understand that this provision is employed in the ordinary course by PJM. PJM's monthly bills net not only credits and charges under the Operating Agreement, but also credits and charges under PJM's Open Access Transmission Tariff (the "Tariff"). In the case of one bill that we reviewed for January 2008, for example, an aggregate net credit to the applicable customer of approximately $79 million could be broken down into gross credits of $105 million ($60 million under the Tariff, the remainder under the Operating Agreement) and gross charges of $26 million ($1.4 million under the Tariff and the remainder under the Operating Agreement).

The example brings into relief the significance of the setoff issue. Table 1 below sets forth the consequences to PJM of the enforcement or non-enforcement of its setoff rights in respect of the above-described bill, were the client in question to file for bankruptcy (and assuming various percentage-recoveries by unsecured creditors in the bankruptcy case). As can be seen, if setoff is enforced, PJM's position is independent of the recovery of the customer's creditors. If setoff is not enforced, PJM is exposed up to the full amount of charges that it would otherwise set off.

Table 1: Gross (Net) Payment Obligation of PJM to Bankrupt Member of $105mm ($79mm)

Unsecured Recovery	Setoff Rights Enforced			Setoff Rights Not Enforced		
	Payment by PJM	Receipt by PJM	Net PJM Payment	Payment by PJM	Receipt by PJM	Net PJM Payment
0%	$79 mm	$0	$79 mm	$105 mm	$0 mm	$105 mm
25%	$79 mm	$0	$79 mm	$105 mm	$6.5 mm	$98.5 mm
50%	$79 mm	$0	$79 mm	$105 mm	$13 mm	$92 mm
75%	$79 mm	$0	$79 mm	$105 mm	$19.5 mm	$85.5 mm
100%	$79 mm	$0	$79 mm	$105 mm	$26 mm	$79 mm

Table 2 considers the flipside situation in which PJM is a net creditor of the bankrupt Member and, accordingly, PJM's outcome is dependent on the recoveries of unsecured creditors regard-

less, but less so if its setoff rights are upheld. Notably, in such a case, the net PJM receivable as an accounting matter can, in the end, result in a net PJM payment as a cash-flow matter.

Table 2: Gross (Net) Payment Obligation of Bankrupt Member to PJM of $105mm ($79mm)

Unsecured Recovery	Setoff Rights Enforced			Setoff Rights Not Enforced		
	Payment by PJM	Receipt by PJM	Net PJM Receipt	Payment by PJM	Receipt by PJM	Net PJM Receipt
0%	$0	$0	$0	$26 mm	$0	($26 mm)
25%	$0	$19.75 mm	$19.75 mm	$26 mm	$26.25 mm	$0.25 mm
50%	$0	$39.5 mm	$39.5 mm	$26 mm	$52.5 mm	$26.5 mm
75%	$0	$59.25 mm	$59.25 mm	$26 mm	$78.75 mm	$52.75 mm
100%	$0	$79 mm	$79 mm	$26 mm	$105 mm	$79 mm

A 2004 study by Deloitte & Touche LLP found that PJM's 60-day aggregate, gross credit exposure to its Members in respect of power sales totaled approximately $2.3 billion but that, after netting and setting off individual member power purchases, the figure was reduced by over 72%, to $640 million.[30] In this regard, it is noteworthy that, in its case against the California independent system operator discussed below, Mirant alone sued to collect $285 million in gross receivables free from an estimated $155 million in purported setoff rights. In addition, as discussed in Section II.C.5 below, it should be noted that to the extent that setoff by PJM is impermissible in a Member's bankruptcy for lack of mutuality, it would follow that all setoffs implemented by PJM against such a Member in the 90 days preceding the bankruptcy may be subject to challenge and rescission.

B. Mutuality in the PJM System

PJM describes itself as a regional transmission organization that, among other things, "coordinates" the movement of wholesale electricity within its operating territory and "operates" the wholesale electricity market in that territory.[31] PJM materials emphasize its independence from generation and marketing interests and speak of amounts owing to and by PJM's Members without specifying PJM – or any other identifiable stakeholder – as the counterparty to or from whom such amounts are owed.[32] While PJM's duties in managing the PJM Interchange Energy Market are wide-ranging and complex – from "scheduling and dispatching of generation resources, accounting for transactions, rendering bills to Market Participants [and] receiving payments from and disbursing payments to the Market Participants" to declaring the existence of an Emergency, coordinating with governmental agencies in the event of Emergency and, nota-

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[30] Deloitte & Touche LLP, "Assessment of Netting & Set-Off Impact in PJM's Market," November 17, 2004, p. 6.
[31] "Overview" of PJM (http://www.pjm.com/about/overview.html).
[32] *See, e.g.*, "PJM Markets and Operations," presentation dated 2006, p. 19 (http://www.pjm.com /services/training/ downloads/markets-operations-supplemental-material.pdf) ("The billing statement presents a net amount due from the PJM member or transmission customer or due to the PJM member or transmission customer."). In some cases PJM refers to the market generally as if it were a counterparty. *See, e.g.*, Operating Agreement, Schedule 1, Section 1.7.10 ("Such a Generating Market Buyer shall be deemed a buyer from the PJM Interchange Energy Market… and shall be deemed a seller to the PJM Interchange Energy Market").

bly, purchasing Emergency energy[33] – by and large, "PJM does not: Take ownership of the energy on the system."[34]

As a result, the degree of "mutuality" in power transactions by and among PJM and its Members is uncertain. In economic substance, ordinary course PJM practice is equivalent to PJM serving as buyer to each Market Seller and seller to each Market Buyer (with a ratable indemnity against costs and losses from each Member that is economically equivalent to a capital call). In form, PJM's financial statements tell a different story: $21 billion in "settlements processed by PJM under the Tariff, Operating Agreement and Reliability Assurance Agreement" in 2006 compared with total 2006 revenues of only $275 million suggests that PJM itself is not buying and selling electricity.[35]

The principal agreements governing the PJM Interchange Energy Market, including the Operating Agreement, the Tariff and the Transmission Owners Agreement ("<u>TOA</u>"), are explicit with respect to the ultimate disposition of funds and of power, but are ambiguous with respect to issues of title to them as they flow, respectively, through PJM's accounting and transmission systems.[36] In particular, the question whether PJM stands as an intermediary in the chain of title (*i.e.*, as an owner of rights), or only as an intermediary in the chain of transfer (*i.e.*, as a pass-through/conduit), is left unclear by passive-tense grammatical construction[37] and arguably conflicting inferences.[38]

Finally, PJM's principal regulator, the Federal Energy Regulatory Commission ("FERC") seems to think of PJM as a conduit or pass-through:

> ISOs/RTOs are typically non-profit entities that administer the market on behalf of market participants. In such markets, credit is collectively extended by market

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[33] Operating Agreement, Schedule 1, Section 1.6.2.

[34] "PJM 101," presentation dated October 4, 2007, p. 16 (http://www.pjm.com/services/training/downloads/pjm101part1.pdf).

[35] PJM, 2006 Annual Financial Report, pp. 9, 15. By contrast, compensation for the administrative costs that PJM incurs in running the power markets is collected by PJM in accordance with Schedule 3 of the Operating Agreement: PJM treats such collections as payment for services rendered, and they are booked as revenues in PJM's financial statements. Were it the case that PJM had obligations clearly in its own right to the Members, there would be little doubt that such obligations could be set off by PJM against such administrative charges.

[36] Section 1.6.2 of Schedule 1 of the Operating Agreement states that PJM "shall, on behalf of the Market Participants, perform the services pertaining to the PJM Interchange Energy Market." That PJM performs these services "on behalf of the Market Participants" suggests that PJM is not engaging in transactions in its own right, but no explicit statement to this effect (or to the contrary) is contained in an operative document.

[37] *See, e.g.*, Operating Agreement §§ 3.2.1(b) ("Market Buyers shall be charged for all load…") and 3.3.1(a) ("Market Sellers shall be paid for all energy scheduled to be delivered in the Day-ahead Energy Market at the Day-ahead System Energy Prices."). Nowhere does Section 3 identify counterparties to the transactions or otherwise specify who is legally liable for the ultimate payment, though PJM is meant to cause the payment to be made out of funds which it is charged with collecting but as to which its entitlement is not expressed.

[38] *Compare, e.g.*, Section 1.1.1 of the TOA ("Each party shall authorize PJM to provide transmission service over its Transmission Facilities in the PJM Region under the PJM Tariff," suggesting that PJM is itself a seller of transmission services), with Section 6.3 of the TOA ("PJM shall… [d]irect the operation and coordinate the maintenance of the Transmission Facilities… [a]dminister the PJM Tariff and provide service thereunder in the PJM Region… [and] [c]ollect and pay to each Party all amounts due to such Party as a Transmission Owner under the PJM Tariff," suggesting that PJM is a conduit).

> participants to each individual market participant. As a result, if one market participant defaults, it falls upon the remaining participants to make up the shortfall (*i.e.*, the default risk is mutualized)... [T]he credit/default risk of undercapitalized market participants lies with the non-defaulting participants, not the ISO/RTO. In other words, due to the nature of ISO/RTO markets, credit is, in effect, collectively extended by market members to each individual market participant.[39]

In other words, FERC recognizes that, rather than mutuality, PJM's operating structure involves a form of "cloud" liability in which credit exposure flows through PJM to each Member in the cloud. In this view, while there are buy and sell transactions, it is only possible to specify the accountable party on one side of each transaction: hypothetical Generator A is not selling to PJM, yet it has no contractual privity with any of the Load Serving Entities buying out of the pool.

C. Assessing the Risk

In light of the above and for the reasons set forth below, we believe there is a substantial risk that PJM, if challenged, would be prohibited from setting off outstanding charges to a bankrupt Member against outstanding payments owing to the Member (or would be incentivized to settle any such challenge at a material cost). As set forth in subsection (1) below, we believe that such a challenge is more likely to arise in certain circumstances than in others.

(1) Certain Practical Considerations; Executory Contracts

One of the principal benefits to debtors of filing for bankruptcy is the right to assume or reject "executory contracts" (generally, contracts as to which performance of some non-monetary obligations remains as to each party). For example, a debtor purchaser may reject an above-market supply contract and shed the associated liabilities,[40] and it may assume a below-market supply contract, retaining the value in spite of any contractual provision giving the supplier a right to terminate on account of the debtor's bankruptcy proceeding. However, as a condition to the assumption of any contract, the debtor must cure any defaults under such contract (*e.g.*, must pay the supplier amounts owing in respect of the pre-bankruptcy period). This means that a debtor Member, even if successful in challenging PJM's setoff right, would ultimately have to pay applicable pre-petition charges in order to assume the PJM Operating Agreement, Tariff and other applicable arrangements.[41]

As a result, we consider the risk of a challenge to PJM's setoff rights to be greatest with respect to bankrupt Members that would not seek to continue their relationship with PJM post-bankruptcy. Such Members may include those who are not economically viable (perhaps because of technological obsolescence or environmental regulations in the case of opera-

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[39] 109 FERC ¶ 61,186.

[40] The supplier would have an unsecured prepetition claim for damages arising from the debtor's breach, which claim would receive the same treatment as other prepetition claims.

[41] We note that the law of executory contracts is itself fraught with ambiguity and it is probable, but not certain, that the Operating Agreement would be determined to be an executory contract capable of assumption. Regardless, both the cost of litigation and the desirability of a good relationship with PJM will tend to incentivize debtor Members who will go forward with PJM to refrain from challenging PJM's setoff rights.

tors, or because it is a pure financial player and failed), Members who are viable but exit a particular line of business,[42] Members that choose to sell their applicable assets to another going-concern rather than reorganize around them (in which case the transferee would have or would have to obtain a distinct relationship with PJM) or Members that would seek to use bankruptcy as an opportunity to begin transacting outside the PJM territory. Members such as these will not need to do business with PJM after exiting bankruptcy and consequently have no reason to assume their executory contracts with PJM – or maintain PJM's good will – and may have a financial incentive to challenge PJM's setoff rights.

We also note that some reorganizing debtor Members could attempt to compel PJM to do business with them post-bankruptcy without assuming existing agreements, relying instead on the Bankruptcy Court, FERC, any applicable common carrier principles and PJM's own institutional interest in a robust market to carry the day. Such a course would be risky. However, it is plausible that a bankruptcy judge would find PJM in violation of the Code's "automatic stay" restrictions on collecting prepetition claims if it conditioned its future business relations with a debtor Member on the assumption of existing agreements and the cure of existing defaults.

(2) Mirant; Absence of Case Law

Precisely the form-substance considerations discussed in Section II.B were at issue in a case brought by Mirant Americas Energy Marketing, LP ("Mirant"), a chapter 11 debtor, against the California Independent System Operator Corporation ("CAISO"), California Power Exchange Corporation and certain California utilities. In that case, Mirant sought a declaratory judgment that CAISO was not permitted to net refunds owed by Mirant pursuant to FERC proceedings in connection with the California power crisis of 2000 against amounts owed to Mirant in respect of Mirant power sales. The heart of Mirant's case was that the structure of the California energy market was such that the mutuality required for setoff was lacking. Many of its factual allegations are analogous to PJM's situation. For example:

> The markets operated on a "pool" basis. Individual sellers were not matched with individual buyers. Energy purchased or sold by market participants was not earmarked in any manner. Instead... CalPX and CAISO acted as clearinghouses and administrators for buyers and sellers in these markets. The respective computer systems of CalPX and CAISO compared bids offering to sell energy, against offer offering to buy energy, in order to set the market clearing price... Once the price was set, bids to sell energy at or below the clearing price and offers to buy energy at or above the clearing price were accepted and "cleared" the market... Bids and offers were submitted to CalPX and CAISO by all sellers and buyers on a basis that was anonymous as to other market participants... Energy delivered into the transmission grid by any particular seller in the California Energy Markets was commingled with energy provided by other sellers on the transmission grid. In addition, funds paid by buyers in the markets were commingled (*i.e.*, pooled to-

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[42] We are advised that multiple members of corporate families may be PJM Members. Bankruptcy respects corporate formalities as a general matter (not without excception); thus, each entity that is a Member would have a separate right to assume or reject its executory contracts, including those relating to PJM.

> gether) in accounts administered by CalPX and CAISO, and were used to pay sellers in these markets... Neither CalPX nor CAISO was itself a market participant or buyer or seller for its own account...[43]

In its motion for summary judgment, Mirant contended that the foregoing, undisputed facts meant that, as a matter of law, CAISO would not be able to show the mutuality required to establish a right of setoff under Section 553 of the Code.

The Mirant case settled, and we have found no other case on point that has been litigated to conclusion. Importantly, the case involved idiosyncratic facts relative to the California power crisis and explicitly did *not* encompass the ordinary course setoffs that are the subject of this memorandum, in part because Mirant wanted to continue to do business with CAISO after emergence from bankruptcy.[44] Nevertheless, the portability of Mirant's basic allegations and legal theory to the ordinary course context, the publicity given to the case[45] and the fact of the settlement all point toward comparable litigation in the future. At least in the case of a debtor that does not require access to PJM services in the future, the cost of adopting the Mirant approach is minimal and the upside potentially great.[46]

(3) Triangular Setoff

The exception to the general rule against the recognition of triangular setoff rights is unlikely to apply to PJM's netting practices, though there is a non-trivial argument that PJM's "cloud" structure of socialized risk taking amounts to a series of triangular relationships. Courts have limited this exception to two affiliated companies, typically a parent and a subsidiary, that expressly state their intention to be treated as one company and whose economic interests are essentially identical. The economic interests of PJM's non-defaulting Members may coincide relative to setting off against a defaulting Member, but they clearly diverge at a more fundamental level, and the setoff provisions of the Operating Agreement, while agreed to among all Members, do not evince an intent to treat all Members as one.

(4) Recoupment

Asserting recoupment rather than setoff would allow PJM to bypass the requirement of mutuality. However, PJM would need to demonstrate that the charges and credits it nets

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[43] Plaintiff's Brief in Support of Motion for Partial Summary Judgment on Claims Against CalPX and CAISO, *Mirant Corp.* v. *California Power Exchange Corp.*, Case No. 03-46590 (Bankr. N.D. Tex.), Aug. 31, 2004, pp. 4-5.

[44] In connection with this memorandum, the authors spoke with counsel to Mirant, who verified that the expectation that the basic contracts governing Mirant's relationship with CAISO would be assumed was a significant factor in limiting Mirant's setoff challenge to just its "exceptional refund" claims and excluding ordinary course cost offsets from challenge. Another factor was that Mirant was in a very large net credit position on ordinary course operations and the ordinary course setoffs were relatively immaterial.

[45] The issues raised in the suit have been addressed, among other occasions, by FERC in a policy statement on credit-related issues (109 FERC ¶ 61,186) and by the Midwest Independent Transmission System Operator in testimony before FERC on its own credit policy (Prepared Direct Testimony of Michael Holstein, http://www.iamu.org/mmtg/MISO%20EMT%20Filing/HOLSTEIN%20FINAL%20WITH%20ATTACH%2003-31-04.pdf.).

[46] Of course, the Mirant case has provided a roadmap of arguments that PJM and other independent system operators may employ as well. Among them are the status of netting under FERC regulations and the relative authority/status of FERC/federal energy regulation and the Bankruptcy Courts/Code.

arise from the "same transaction," which may be challenging in light of the relatively strict definition espoused by the Third Circuit. It is uncertain whether a court would view PJM's netting as a single or multiple transactions. In any given month, PJM may administer thousands of different purchases and sales of energy for an individual customer. Moreover, PJM administers not simply the sale of energy but also the allocation of transmission losses and a host of ancillary services. One could imagine, by way of example, a court finding individual transmission charges allocated to individual megawatt hours to be part of the same transaction as the megawatt hour purchase or sale (thus permitting recoupment by PJM of transmission charges against amounts owed to power sellers) but not finding power purchases at one location and one time to be part of the same transaction as the purchase of power at any other location/time pairing.

In one recent case involving analogous facts,[47] a Maine bankruptcy court rejected recoupment where multiple parties were netting charges arising from different services: Several railroads participated in an agreement to net out interline freight charges on a monthly basis. The railroads accomplished this through a trustee structure established to facilitate settlement and payment of these charges among the members. The court found that recoupment was not applicable because the "settlement system nets claims [railroads] hold against each other arising from a multitude of separate transactions, each distinct and initiated by a third-party shipper. That the railroads have overlaid an elaborate, efficient, integrated system to reconcile their accounts and pay one another does not consolidate those separate transactions into a single one."[48]

(5) <u>Scope of Risk; Preference Law</u>

The exposure of PJM is not necessarily limited to unbilled amounts or amounts that are yet to be set off at the time of a Member's bankruptcy filing. Under the Code, payments to creditors prior to a bankruptcy filing may be "avoided" (*i.e.*, pulled back) by a debtor if they qualify as a "preference" under Section 547 of the Code and no defense otherwise applies.

A "preference" is any payment to or for the benefit of a creditor (*i.e.*, PJM), on account of an antecedent debt (*i.e.*, for any amount owing immediately prior to the time of the payment), made within 90 days prior to the bankruptcy filing (or one year if the creditor is an insider) and while the debtor was insolvent (highly likely in the case of a bankrupt), provided that such payment permits the creditor to obtain more on its claim than it would obtain in a chapter 7 liquidation of the debtor.[49] If it were held that PJM did not have mutual setoff rights that would be valid in bankruptcy, then its pre-bankruptcy setoffs would, by hypothesis, enable PJM to obtain more on its claims than it would in a chapter 7 liquidation. Therefore, all such setoffs in the 90 days prior to bankruptcy may be avoidable. As such, PJM's exposure to the setoff issue may extend to as much as three months of netted payments rather than the one month one might expect from PJM's billing cycle.

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[47] *In re Bangor & Aroostook R.R. Co.*, 320 B.R. 226 (Bankr. D.Me. 2005).

[48] *Id.* at 241. On the other hand, the court held that setoff *could* be asserted. "That there are multiple shipments and multiple parties is of no moment. The circumstances reduce to sets of bilateral relationships in which one railroad owes freight charges to another, and the second owes freight charges back to the first." *Id.* at 231. Because the applicable transactions certainly do *not* reduce to "sets of bilateral relationships" *among PJM Market Participants*, this reasoning would not apply in the PJM case. Whether they reduce to a series of bilateral relationships *between PJM and its Market Participants* is the question at bar.

[49] 11 U.S.C. § 547(b).

That said, one significant defense to a preference action that PJM would undoubtedly assert is that the preferential payment was (i) "in payment of a debt incurred by the debtor in the ordinary course of business or financial affairs of the debtor and the transferee," and (ii) "made in the ordinary course of business or financial affairs of the debtor and the transferee [or] made according to ordinary business terms."[50] Given PJM's custom of netting, part (ii) of the test is likely to be satisfied. Whether part (i) is satisfied will be fact-contingent. While it is not unlikely to be satisfied, it is also not uncommon for a company to undertake significant, non-ordinary course transactions in the period leading up to a bankruptcy filing. Other potential defenses include the "new value" defense, pursuant to which an otherwise preferential payment is not avoidable if the creditor, in this case PJM, extended new credit to the debtor following the payment at issue. PJM is a candidate for the new value defense with respect to debtor Members that transact through PJM on a regular basis, even in the period leading up to bankruptcy.

(6) Forum and Public Policy Considerations

A fundamental policy underlying the Code is that similarly situated creditors should receive equal treatment. As a result of this policy, Bankruptcy Courts can be expected to tilt toward confining rather than expanding setoff rights. More broadly, debtors in Bankruptcy Court are generally thought to have a "home-field advantage," as bankruptcy judges tend to equate maximizing the size of the debtor's estate and the recoveries of its general unsecured creditors with "successful" reorganization or, at the least, enhancing the prospects for a successful reorganization. The Mirant defendants were sufficiently concerned about the setoff case being heard in Bankruptcy Court that they moved (successfully) to "withdraw the reference" on the matter; *i.e.*, they caused the case to be transferred from the Bankruptcy Court to the local federal district court.[51] The Mirant case was a ripe candidate for withdrawal of the reference given the large number of interested parties, the complex issues stemming from the California power crisis and, most importantly, the applicability of various federal statutes other than the Code to the dispute. A more straightforward case on ordinary setoffs is less likely to be heard outside a bankruptcy court.

III. Courses of Action

Various courses of action – or, indeed, inaction – might be pursued in light of the foregoing considerations.

A. Status Quo

The Operating Agreement gives PJM the right to seek ratable contributions from each of its non-defaulting Members to cover financial shortfalls caused by Members who default in their payment obligations.[52] Essentially, the PJM Membership collectively has self–insured an individual Member's default, to the extent such default exceeds the Financial Security required from the individual Member under the Tariff. PJM and its Members may consider such insur-

[50] 11 U.S.C. § 547(c).
[51] Such transfer was a material factor in Mirant's decision to settle the case.
[52] Operating Agreement, Section 15.2.

ance to be a sufficient and cost-effective hedge against the risks identified in this memorandum. This view would differ from the practices followed by other comparable organized markets – exchanges, boards of trade and clearinghouses – who commonly ensure the full enforceability of their netting and set-off practices before exposing their members or market participants to the risk of participant default.

B. Tighten Existing Credit Management Measures

PJM might also address the risks identified by increasing collateral requirements, bringing them, if not all the way, then at least closer to correspondence with its gross rather than net exposure to any given Member. Netting and offsets could continue as currently practiced as a billing and cash flow matter but would not with respect to calculations of collateral requirements. Alternatively, risk-mitigation measures not specifically directed toward the setoff issue might be employed[53], including shortening settlement periods, which would have the effect of minimizing the extent to which questionable netting and set-off practices are employed.[54] Any such measures would have costs and, in some cases, distributive consequences. Increasing collateral requirements would impose a capital burden on applicable Members (and in turn reduce overall liquidity in the power market), while reducing the exposure of the remaining Members to such Members' credit. Shortening settlement periods would effectively shift the cost of default risk from Members typically in a net credit position (who would be paid more rapidly, reducing their capital costs) to those typically in a net debit position (who would incur increased financing costs as PJM reduced its float to them).

C. PJM as Universal Counterparty

PJM can also consider undertaking the contractual fixes required to conclusively establish the mutuality necessary to support setoff of reciprocal obligations with Members that enter into bankruptcy proceedings. The result would be to shift more of the default risk of any given Member to that Member's shareholders and non-PJM creditors, and away from the other Members. There would be up-front costs associated with drafting and approving amendments to the Operating Agreement, Tariff and various other forms and agreements, and no doubt some level of incremental administrative and accounting expense. Regulatory implications would also have to be considered.[55]

However, such a regime would not be expected to have a material impact on PJM's costs structure or its operations, including its cash management, settlement, billing and collection. Indeed, the wide adoption of the universal counterpart model suggests that aggregate efficiencies can be achieved by crystallizing rights with identifiable parties. Security and commodity markets around the world function in this manner, whether through clearinghouses, boards of trade, exchanges or other forms. While electricity markets nationwide in this country

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[53] We note that FERC, in its policy statement on credit-related issues for independent system operators, has stated that an RTO must balance its credit management policies against the risk of creating barriers to market participation. 109 FERC ¶ 61,186.

[54] FERC has endorsed this measure, commending ISO-NE for implementing a weekly billing cycle. 109 FERC ¶ 61,186.

[55] We have not studied the extent to which the proposed reform would result in PJM falling under the jurisdiction of the Commodity Futures Trading Commission, but we note the possibility of an increased regulatory burden for PJM.

are organized in similar fashion to PJM, this is likely a collective vestige of the historical power pool model. The system in the United Kingdom is characterized by a single, universal counterparty[56], thus addressing mutuality under English law (upon which the American law is based).[57]

While we have not undertaken to study precisely what contractual changes would be desirable in the event PJM were to choose this course of action, the broad thrust of such changes is clear: to eliminate ambiguity with respect to the counterparties to any transaction taking place in the PJM Interchange Energy Market. PJM would be specified as the buyer to each Market Seller and seller to each Market Buyer and would take title to power and to receivables, and would be liable for payables, in its own name and right.

Placing PJM in the chain of legal title in this fashion would create the mutuality of obligations requisite to setoff in bankruptcy. At the same time, it need not expose PJM itself to the credit risk of its multiple counterparties to a greater degree than under the status quo. As under the current system, PJM could have a contractual right to look to the Members generally to make up funding gaps resulting from individual Member defaults, though the assurance of setoff rights should result in such gaps being fewer and smaller, to the benefit of all. Existing limitations of PJM liability and default standards under the Tariff and Operating Agreement may be carried forward.

D. Independent Clearinghouse

Finally, PJM could consider outsourcing all or a subset of its credit management, billing, payment and settlement functions to a third party "clearinghouse" that may or may not be affiliated. The use of a clearinghouse, as such, does not solve the mutuality/setoff problem, and the move to a clearinghouse would require either (i) the designation of PJM as a universal counterparty (per above) and the novation of net positions from PJM to the clearinghouse, or (ii) the entry into unambiguous bilateral contracts by the clearinghouse with each Market Participant. The notion of a clearinghouse is, in this sense, an incremental step beyond the universal counterpart reform, and we raise it largely to suggest the relationship between specifying legal rights and market development. Establishing the clean title that is required for mutuality could, in turn, enable innovation in contracting,[58] financing and hedging as competitive electric markets mature, whether along the lines of existing commodities markets[59] or otherwise.

IV. Conclusion

PJM's structure, with a multitude of operating entities surrounding a core market administrator, has to date not been an impediment to the development of an electricity market that is both competitive and efficient. At the same time, there is no doubt that the present contractual regime used to implement this structure leaves PJM and its Members exposed to more

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[56] *See* The Balancing and Settlement Code (*available at* www.elexon.co.uk/bscrelateddocs/BSC/default.aspx).

[57] The right of setoff itself originated in 17th century English common law and was later applied by English equity courts to bankruptcy cases.

[58] See Footnote 8 regarding special protections under the Code for counterparties to bankrupt entities in respect of rights under, among other types of "financial" contracts, commodity contracts.

[59] The New York Mercantile Exchange, among other large commodities exchanges, employs a clearinghouse system in which the clearinghouse serves as a central counterparty to all buyers and sellers.

credit risk than is necessary. Should PJM find itself facing a challenge to its setoff rights in an individual Member's bankruptcy proceeding, certain practical considerations and legal arguments in PJM's favor *could* prevail. However, if it so chooses, PJM has the ability to implement straightforward contractual changes to its governing documents that would not affect its basic operations but would assure the efficacy of PJM's existing setoff practices in a Member bankruptcy. PJM may consider it prudent (especially for an enterprise of this scale and functional import) to consider this opportunity more fully.